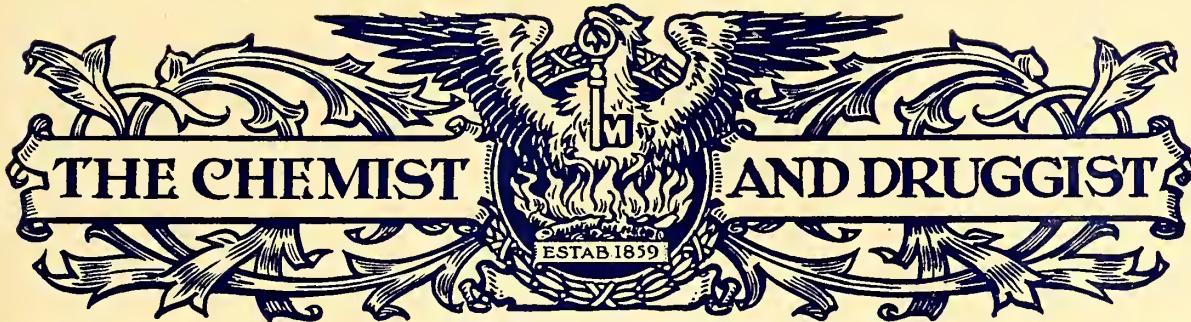




Digitized by the Internet Archive
in 2014

<https://archive.org/details/b19974760M2396>



REGISTERED AS A NEWSPAPER.

TELEPHONE : CENTRAL 3617
TELEGRAMS : "CHEMICUS,"
CANNON, LONDON (2 Words)

PUBLISHED WEEKLY AT 42 CANNON ST., LONDON, E.C.4.

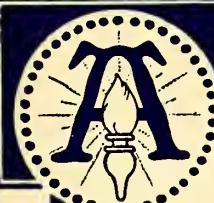
SUBSCRIPTION WITH
DIARY 20/- PER ANNUM.
SINGLE COPIES 9d.

No. 2296.

JANUARY 26, 1924.

Vol. C.

"Torch" Brand EXTRACT OF MALT with COD-LIVER OIL



TRADE
MARK

AVOID Price Cutting by selling at protected prices goods that have an established reputation for excellence. The popular "Torch" Brand Cod-Liver Oil with Malt Extract is unsurpassed in quality and packing and gives satisfaction all round.

P.A.T.A. PRICES

Size	Wholesale	Retail
½ lb. ..	7/7½ doz. ..	1/- each
1 lb. ..	11/6 ..	1/5 ..
2 lb ..	20/6 ..	2/8 ..
4 lb. ..	38/6 ..	5/- ..
7 lb. ..	64/9 ..	8/6 ..

SPECIAL QUOTATIONS FOR LARGE QUANTITIES.

A fair profit to the Retailer. A fair price to the Public.

We help sales by supplying artistic 6-page folders for distribution and material for an attractive Window Display.



Allen & Hanburys Ltd.
BETHNAL GREEN, E.2.

EVERY TABLET OF Wright's Coal Tar Soap

CARRIES THIS ADVERTISEMENT OF



Wright's Lysol

The most efficient antiseptic for the Hospital Ward, and as a disinfectant for use in the Home.

Medical and Surgical Uses.
To destroy micro-organisms.
To sterilise the hands of doctors and nurses.
To render surgical instruments and appliances aseptic.
To prepare antiseptic lotions.
To disinfect linen and utensils.

Domestic Uses.
To prevent infectious diseases.
To wash cupboards, floors, and yards.
To cleanse cages, kennels, etc.
To flush lavatories, sinks, and drains.
To use in water for bath and toilet.

Prices from 1/- to 12/6.

A much appreciated convenience is the graduated aluminium measure supplied free with every bottle.

THE CERTIFICATE OF
THE
Institute of Hygiene
IS THE GUARANTEE
OF QUALITY,

and the protected price (P.A.T.A.),
together with special bonus for
display, assure generous profit.



WRIGHT, LAYMAN & UMNEY, LTD.
SOUTHWARK, LONDON, S.E.1.

Jan. 11th, 1924

Gentlemen,

The 56 lbs. of C.C. Jubes arrived yesterday. Sales are extraordinary. I shall be sold out again to-morrow.

Please despatch immediately.

1 cwt. C.C. Jubes and show matter.

Yours faithfully,

.....
Would you
like a sample
and
particulars?

C.C. Jubes stands for

CHERRY COUGH JUBES

Made by and SOLD FOR YOU by

WIGGLESWORTH, LTD.
WESTHOUGHTON - - LANCS.

X Time and energy spent on increasing sales yield infinitely more profit than can be made by keen buying.

There is a ton of effort in every ounce of display sent out by "THE WIGGLESWORTH WAY."

Increased sales come from display.

A A

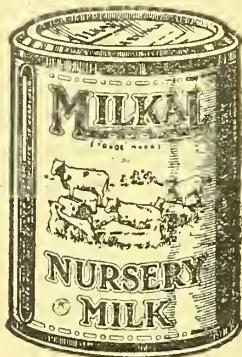
Tell your Customer - Clean Milk is now Cheaper

MILKAL

THE CLEAN MILK

is now reduced from 3/6 to **2/9** 1-lb. size

„ „ „ „ **1/9½** „ **1/5 ½**-lb. „



MILKAL

THE CLEAN MILK

A MOST PROFITABLE LINE FOR YOU TO HANDLE.

Milkal Nursery Milk, full cream DRIED Milk is baby's best food from birth, and for mothers and invalids. You can recommend Milkal with every confidence for every milk purpose, and you will find it a most profitable line to handle.

Stocks should be returned to J. Lyons & Co., Ltd., Cadby Hall, London, W., in order that new stocks may be sent, and the necessary cash adjustment made.

Write for Trade Terms to the Sole Distributors:

J. LYONS & CO., LTD.
Cadby Hall, LONDON, W.

Produced and packed in Devon (England) by MILKAL, Ltd., London and Devonshire.

Stocks are held at the following depots of Messrs. J. Lyons & Co., Ltd., where you can obtain one or more tins at lowest trade terms:

James Watt St., BIRMINGHAM
28 Aire Street - LEEDS
West End Chambers, Commercial Road - SOUTHAMPTON
Lambert Place, Lambert Street, SHEFFIELD

54 Brick Street - LIVERPOOL
Loaine Crescent,
NEWCASTLE-ON-TYNE
219 West George Street, and Grafton Street - GLASGOW

96 North Western Street, Ardwick,
MANCHESTER
4 Redcross Street - BRISTOL
68 Millicent Street - CARDIFF
19 Cromford St., NOTTINGHAM

Products of Quality

MALT EXTRACT WITH Cod Liver Oil AND PLAIN MALT EXTRACT

TESTIMONY.

One Pharmacist writes :

"We are duly in receipt of your sample Malt and Oil. There is only one thing to say about it. It is perfect. Please book contract B to be drawn upon when required."

EXPERIENCE proves beyond doubt that the strictest attention to QUALITY establishes a high reputation and is the prime factor in determining the permanent success of any commodity.

As a Pharmacist your turnover in Malt Extract with Cod Liver Oil is a matter of considerable importance to your business, so that to you QUALITY has a very real meaning.

Being one of the largest manufacturers in the world of Malt Extract we can rightly claim to possess exceptional facilities for supplying your requirements in Malt Extract with Cod Liver Oil and/or plain Malt Extract. Only the finest English Barley Malt and the purest Norwegian Cod Liver Oil are used by us.

Manufacture takes place at our model factories, which are located in the beautiful country district of King's Langley, Herts. All our machinery is of the very latest type. Our staff of qualified chemists are completely versed in the technique of manufacture, and each output is analysed to ensure purity and activity of the ingredients and correct standardisation.

Our distinctive labels are artistic and dignified, and the complete range provides a charming variety suitable to all tastes. The service we render in showcards, background material, also selling leaflets bearing your own name and address, is we believe unequalled.

Do not place your business elsewhere until you have obtained our samples and prices, which compare favourably with any on the market.

Your enquiries are earnestly solicited. We know we can satisfy the most exacting need.

A. WANDER Ltd.,

Manufacturing Chemists and Makers of "Ovaltine"
Tonic Food Beverage, etc.

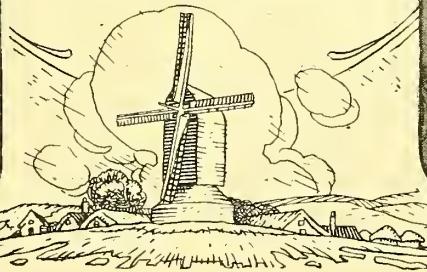
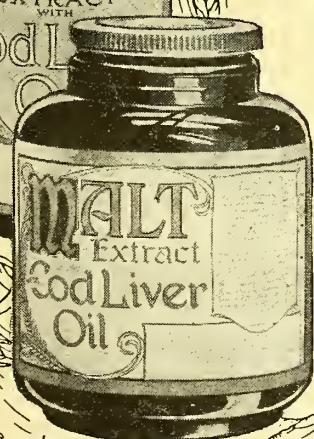
45, COWCROSS ST., LONDON, E.C.1.

Works; KING'S LANGLEY, Herts.

TESTIMONY.

Another remarks as follows :

"I would like to add that your Malt Extract with Cod Liver Oil pleases my customers better than any I have had hitherto."



TO OUR FRIENDS ABROAD

ESTABLISHED

1833.



"STAFFALLENS"

BRITISH EMPIRE EXHIBITION 1924.

Before you depart for England to visit the British Empire Exhibition, 1924, make a note of the number of our Stand

A29
CHEMICAL HALL,
PALACE OF INDUSTRY,
BRITISH EMPIRE EXHIBITION,
LONDON.

Our Exhibit will prove of exceptional interest to all buyers of
 ESSENTIAL AND EXPRESSED OILS,
 PHARMACEUTICAL PREPARATIONS,
 POWDERED DRUGS AND SPICES,
 RESINS, JUICES, TINCTURES, FRUIT
 AND FLAVOURING ESSENCES.

STAFFORD ALLEN & SONS LTD.

COWPER STREET, FINSBURY,
LONDON, E.C.2.

Codes used—
 BENTLEY'S AND APPENDIX,
 A.B.C. (4th and 5th Editions).

Cables—
 "STAFALENS, LONDON."

INDEX TO ADVERTISERS

Acelta Capping Co., Ltd. (Bottle Caps)	45	British Dyestuffs Corporation, Ltd. ..	ix
Addis, R., & Son (Toothbrushes)	38	Brunner, Mond & Co., Ltd. (Alkalies) ..	vi
Allen & Hanburys, Ltd. (Cod Liver Oil & Malt)	Cover	Burge, Warren & Ridgley, Ltd. (Aluminium Ointment Boxes)	45
Allen, Stafford, & Sons, Ltd. (British Empire Exhibition)	4	Burgoyne, Burbidges & Co., Ltd. (British Empire Exhibition)	v
Altringham Rubber Co. (Rubber Corks)	51	Burrough, J., Ltd. (Absolute Alcohol) Text	
American Drug Supply Co., Ltd. (Dextri-Maltose)	xviii	Burroughs Wellcome & Co. (Cod Liver Oil)	55
Anglo-American Oil Co., Ltd. (Brilliantines & Toilet Paraffins)	28	Casclloid, Ltd. (Celluloid Caps)	51
Anglo-French Drug Co., Ltd.	xvi	Cartwright, W. B., Ltd. (Toilet Preps.)	29
Archibald Co. (Oatmeal Cream)	36	Cavendish Chemical Corporation	xvii
Arcos, Ltd. (Russian Crude Drugs, &c.)	xii	Christy, T., & Co. (Pyshan Points Tea, Dr. Page Barker's Scurf Lotion, Musteroles, &c.)	35-51-54-56
Arnfield, J. C., & Sons, Ltd. (Drugs)	vii	Chrystoid (Chemists), Ltd. (Glycerine, Lemon and Honey)	xvii
Association of Manfg. Chemists, Ltd. Col. Supp.		Clayton & Jewett, Ltd. (Essences)	18
Ayrton-Graham, Ltd. (Shopfittings)	48	Cohen, G., & Armstrong Disposal Corporation	22
Ayrton-Saunders & Co., Ltd. (Wholesale Druggists)	15	Coleman & Co., Ltd. (Wincarnis)	20
Bailey, R., & Son, Ltd. (First Aid Cases)	xxvii	Connell, A., & Co. (Essences, &c.)	24
Barker, R., & Son, Ltd. (Infants' Preservative)	20	Cooper, Son & Co., Ltd. (Cachets)	xvi
Battle, Hayward & Bower (Sheep Dips, &c.)	48	Corrugated Packing Materials Co., Ltd. (Corrugated Paper Boxes, &c.)	50
Battle, Son & Maitby (Vermi-Killer)	46	Courtin & Warner, Ltd. (Chemicals, &c.)	ix
Bayer Products, Ltd.	56	Cow & Gate Milk Food	7
Beaton, Clark & Co., Ltd. (Bottles)	53	Cox, Arthur H., & Co., Ltd. (Chest-nuts)	Text
Beaverpuf, Ltd. (Powder Puffs)	37	Cresswell Bros., Branch Intl. Sponge Importers, Ltd. (Sponges)	39
Benger's Food, Ltd. (Foods)	56	Crookes Laboratories (Collosol Ferromalt)	xviii
Bengue, Dr., & Co. Col. Supp.	xxi	Damancy & Co. (Digentenzymes Tablets, &c.)	ix
Berdoe & Fish (Valuers, &c.) Col. Supp.		De Jongh, Dr. (Cod Liver Oil)	20
Berk, F. W., & Co., Ltd. (Acids, &c.)	ii	De St. Dalmas, A., & Co., Ltd. (First Aid Cases)	xxvi
Berkshire Printing Co., Ltd. (Bags, Cartons, &c.)	xx	Dearborn (1923), Ltd. (Toilet Specialities)	30
Berton, Arthur, Ltd. (First Aid Cases)	xxiii	Denver Chemical Manfg. Co. (Antiphlogistine)	xv
Betts & Co., Ltd. (Coll. Tubes)	49	Distributing Corp. (London), Ltd. (Bandages)	xxii
Bidwells, Ltd. (Gloria Toothbrushes)	36	Dubarry et Cie (Vanity Box)	Cover
Blackaller & Pleasance (Eau de Cologne)	25	Eastern & Russian Trading Co., Ltd. (Santonin, &c.)	xii
Blyton, Astley & Co. (Lozenges, Pastilles, &c.)	xi	Edwards Harlene, Ltd. (Hair Preps.)	35
Bourjois, A., & Cie, Ltd. (Ashes of Roses)	40-41	Eno, J. C., Ltd. Enolin, Ltd. (Tooth Paste)	1 36
Brand & Co., Ltd. (Foods)	18		
Brett & Co. Col. Supp.			
Brierley, J. Col. Supp.			

[Continued overleaf.]

TOMLINSON & HAYWARD Ltd.

WATERGLASS

SHEEP DIPS and VETERINARIES.

DISINFECTANTS, LYSOL, etc.

HAYWARD'S PAINT STICKS (Original).

EUREKA WEED KILLER and

HORTICULTURAL SUNDRIES.

"Own Name" packing, write for prices.

Established 1842. No connection with any other Firm. Please address—

TOMLINSON & HAYWARD, LTD., LINCOLN

Telegrams: "Tomlinson."

Phone 108.

INDEX—cont.

Hovenden, R., & Sons, Ld. (Lloyds Euxesis)	30	Medical Supply Assocn., Ld. (Medical Electric Apparatus)	Cover
Howard Lloyd & Co., Ld. (Dog Medicines & Pills)	46	Methylating Co., Ld. (Methylated Spirit)	42
Huisking, C. L., Inc. (American Drugs)	xiii	Millar, A., & Co., Ld. (Orange Wine)	51
Ingram & Royle, Ld. (Mineral Waters)	8	Milners Chemical Co. (Plano)	xxi
Jackson, J. P., & Co., Ld. (Machinery)	43	Money's Patents, Ld. (Bottles)	42
Johnson & Sons (Mfg. Chts.), Ld. (Chemicals)	iii	Newball & Mason (Waterglass)	23
Josephs, Philip, & Sons, Ld. Col. Supp. Kay Bros., Ld. (Compound Essence)	xiv	Newberry, F., & Sons, Ld. (Embossation)	xxi
Kent, G. B., & Sons, Ld. (Brushes)	38	Nildé (Paris) Agency, Ld. (Toilet Preps.)	26-27
Kerfoot, T., & Co., Ld. (Licorice and Menthol "Souchets")	17	Oppenheimer, Son & Co., Ld. (Roboleine)	xvii
King, J. C., Ld. (Duplicate Books)	23	Orridge & Co. (Valuers, &c.)	Col. Supp.
Kirby, H. & T., & Co., Ld. (Tablets and Pills)	22	Owbridge, W. T., Ld. (Lung Tonic)	xii
Lang, Jules & Son (Glassware)	52	Owtazia Co. (Flasks)	50
Langley-Smith & Co. (Turpentine)	43	Page, Chas., & Co., Ld. (Chemicals)	viii
Laws, Stracey & Dymond, Ld. (Tablets)	x	Papier Poudre, Ld. (Toilet Preps.)	36
Laycock, T., & Co. (Bottles)	52	Pears, W. A. (Aniline Dyes)	viii
Lax & Shaw, Ld. (Bottles)	53	Pearls, A. & F., Ld. (Transparent Soap)	13
Levermore, A., & Co., Ld. (Precipitated Chalk)	51	Perfume House (Sandalwood Oil)	31
Licenses and General Insurance Co., Ld.	50	Phillips, B. L. & N., Ld. (Vermilion Killers)	46
Lincoln & Midland Counties Drug Co., Ld. (Clarke's Blood Mixture)	xvi	Pierson, Morrell & Co., Ld. (Aspirin)	x
Liverpool School of Pharmacy	44	Quelch, Henry C., & Co. (Nuctone)	32
Lloyd, Aimee & Co. (Euxesis)	31	Raphael, Ld. (Spectacle Lenses)	44
London College of Pharmacy	44	Roberts & Co. (Tonic)	xiv
Lorimer-Marshall, Ld. (Embossation, &c.)	23	Roberts & Sheppie (Melrose Tablets)	xvi
Lyons, J., & Co., Ld. (Milka Nursery Milk)	2	Robinson & Sons, Ld. (Boxes)	Text
McKesson & Robbins, Inc. (Pills)	xv	Rose, J. L. (Pyrogallic Acid)	ix
Machon's Comfortine Co.	xix	Rudduck & Co. (Shopfittings)	Col. Supp.
Macfarlan, J. F., & Co., Ld. (Alkaloids)	iv	Rylands Glass & Engineering Co., Ld. (Bottles)	52
Manchester School of Pharmacy	51	Saint Raphael Cie (Tonic Wine)	19
Mandall & Co., Ld. (Licorice)	xvi	Saltrates, Ld. (Rendel Bath Saltrates)	12
Matthews, D., & Son	Col. Supp.	Sandoz Chem. Co., Ld. (Pharm. Products)	xii
Maw, S., Son & Sons, Ld.	11	Scholl Manufg. Co., Ld.	50
Mawson & Procter, Ld. (Majax)	18	Schutze, F., & Co., Ld. (Baby Pacifiers, &c.)	xxii
May, Roberts & Co., Ld. (First Aid Cases)	xxviii	Scott, A. & R., Ld. (M.O.F. Food)	7
		Scott, A., Ld. (Fancy Goods)	37
		Scott & Turner, Ld. (Andrews Liver Salt)	19
		Scruton, Oscar, & Co. (Nurse Harvey's Mixture)	18
		Scurr, C. A. (Optical Tuition)	44
		Shadeine Co. (Hair Dyes)	36
		Sherley, A. F., & Co., Ld. (Dog Medicines)	46
			Cover

Genatosan's NEW Preparation. The Companion of Formamint

Nasmint

Brand of GERM-KILLING SNUFF

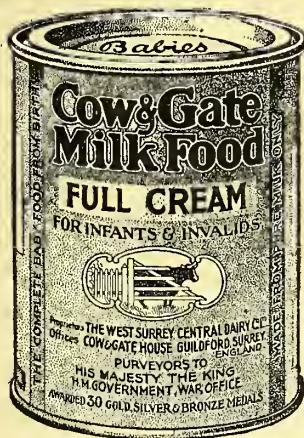
Prevents and Cures Cold in the Head

Just as Formamint kills the germs in the throat and mouth, Nasmint kills them in the nasal passages. It is a fine powder administered by inhalation into each nostril alternately at the first symptom of an impending cold.

Your customers will be interested in Nasmint, because everyone has a cold now and then. The selling price to the public is 2/6 per packet. Buying price from wholesaler 23/- per dozen. It is on the P.A.T.A. list.

If Nasmint is ordered from us direct as part of a £5 mixed order, the price is 23/- per dozen less 10%, cash with order, carriage paid.

GENATOSAN LTD., LOUGHBOROUGH, LEICESTERSHIRE



**BABIES
LOVE IT!**

Cow & Gate House
GUILDFORD, SURREY

**P. A. T. A.
LARGE SALE
PLUS
BIG PROFITS
25% to
33½% PROFIT**

Made by Sellers of

**Cow & Gate
Milk Food**

**EXTENSIVELY
ADVERTISED.
INCREASING
DEMAND.**

*When you are
asked for M.O.F.*

Can you supply the demand?
Doctors and nurses everywhere
recommend M.O.F. as an econ-
omical and nourishing food for

infants and invalids. Do not
neglect this chance of perma-
nently increasing your business.

You will find it a quick seller.



**SCOTT'S
M.O.F.
FOOD**

One thousand doctors recommend it!

Fixed Retail Price
per **1/9** tin
(on P.A.T.A. list).

Send your order to-day
through your Whole-
saler, or direct to
A. & R. SCOTT, LTD.,
Colinton - Midlothian
(Makers of Scott's
Porridge Oats).

Natural Mineral Waters.

We beg to draw attention to the fact that there is a constant and increasing demand for Natural Mineral Waters, Salts and Pastilles of all descriptions.

The great body of leading Chemists are already dealing in our goods, but should this not be the case with others we venture to suggest that it would probably be advantageous for them to keep a small stock of those Waters, Salts and Pastilles which are enquired for regularly in order to enable them to participate in a share of this important business.

PLEASE WRITE FOR OUR DETAILED PRICE LIST.

Show cards, dummy bottles, and pamphlets will be forwarded carriage paid on application.

INGRAM & ROYLE, Ltd.

IMPORTERS, EXPORTERS AND DEALERS IN ALL

Natural Mineral Waters, Salts and Pastilles.

Sole Agents for

VICHY-CELESTINS

and all other State Springs of Vichy.



Bangor Wharf, 45 Belvedere Road, London, S.E.1
LIVERPOOL: 19 South John Street.

BRISTOL: Bath Bridge



Pharmaceutical & Photographic Products

(WHOLESALE QUANTITIES ONLY)

Acetanilid	Gallic Acid	Potassium Chorate
Acetic Acid	Glycerine	Potassium Permanganate
Acetyl Salicylic Acid	Glycerophosphates	Potassium Sulphoguaiaconate
Acetone	Guaiacol and Salts	Pyrogallic Acid
Aethocaine	Heliotropine	Quinidine and Salts
Amidol	Hexamine	Quinine and Salts
Amidopyrin	Homatropin and Salts	Quinine Ethyl Carbonate
Amidopyrin Salicylate	Hydroquinone	Quinoidine
Barbitone	Ichthyol Substitute	Resorcin
Benzoic Acid	Kelene	Rhodol (Equivalent to Metol)
Benzamine Hydrochlor	Lactic Acid	Saccharin
Benzamine Lactate	Lanoline	Safrol
Benzo-Naphthol	Lecithin	Salicylates
Beta-Naphthol	Lemon Oil	Salipyrin
Bismuth Salts	Lithia Carbonate	Salol
Bromides	Mercurials	Soda Benzoate
Caffeine Pure	Methylene Blue Medicinal	Soda Hyposulphite
Calcium Lactate	Methyl Salicylate	Soda Sulphite Anhydrous
Calomel	Methyl Sulphonol	Sugar/Lead
Chloral Hydrate	Milk Sugar	Tannic Acid Leviss
Cinchonidine and Salts	Oxalic Acid	Tannin Albuminate
Cinchonine and Salts	Pancreatin	Tartaric Acid
Citric Acid	Paraldehyde	Terpine Hydrate
Cocaine and Salts	Peppermint Oil	Terpineol
Corrosive Sublimate	Pepsine	Theobromine and Salts
Coumarin	Peptone	Thymol Crystals
Cream/Tartar	Phenacetin	Titanium White
Creosote	Phenazone	Tropacocaine and Salts
Creosote Carbonate	Phenolphthalein	Vanillin
Eucalyptus Oil	Piperazine	Zinc Oxide
Formaldehyde	Potassium Binoxolate	Zinc Phosphide

R.W.Greeff & Co.Ltd.

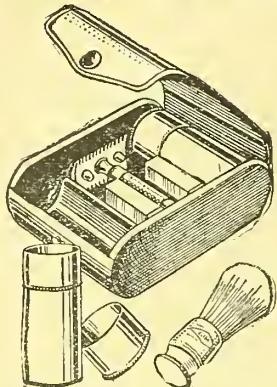
Thames House Queen Street Place London E.C.4

*Telephone 6550 City
(8 LINES.)*

MANCHESTER BRANCH
PALATINE BANK BUILDINGS
10, NORFOLK STREET.
TELEPHONE CITY 5706/5707

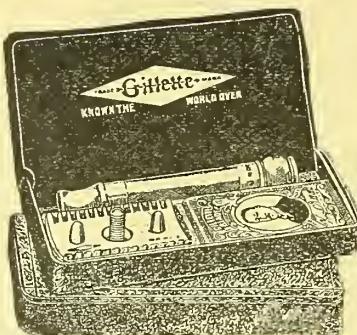
NEW YORK AGENTS
R.W.GREEFF & CO. INC.
78, FRONT STREET.

SPECIAL RAZOR OFFER



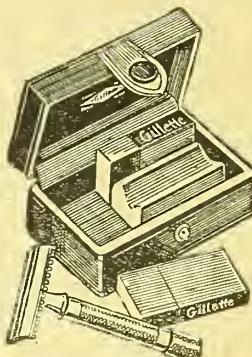
GILLETTE TRAVELLERS' SET.

Comprising: Gillette Razor, Shaving Brush in Case, Shaving Stick in Case, Two Blade Boxes. One Gillette Blade, U.S.A., 10/- each. The whole of the above set is 14-carat triple gold plated.



GILLETTE BROWNIE RAZORS

2/- each. 22/- doz.



(Old 21/- type.)

Triple Silver plated Razor with one Gillette Blade in purple velvet & satin lined leather covered case, 3/9 each. As above, Dull finish ... 2/10 each.

VALET AUTO-STROP MODEL "C" RAZOR

4/- each. (Retail 6/-)

FLYING MAN RAZORS with 3 blades.

18/- doz. (Retail 3/-)

GENUINE GILLETTE BLADES, U.S.A.

30/- per Box.

ALL OTHER KNOWN MAKES OF BLADES IN STOCK.

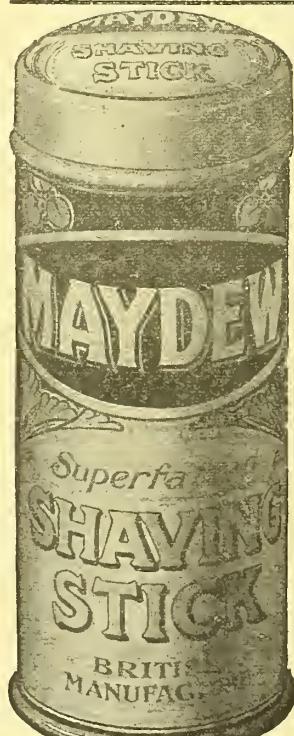
Special Prices for Quantities.

EVER-READY RAZORS FREE

With every half-dozen packet of Ever-Ready Blades a genuine Ever-Ready Razor will be included free of charge. Price 2/8 doz. (2 free Razors). 30/6 Gross (24 free Razors).

DRESSING COMBS	POCKET COMBS	SHAVING BRUSHES
4/6 to 9/- doz.	1/6 and 1/8 doz.	7/6 and 9/6

BEST FORGED STEEL NAIL & CUTICLE SCISSORS, 8/6 doz.



"MAYDEW" Shaving Sticks.

Wrapped Embossed Tinfoil Royal Blue and Decorated Tin As illustrated 4/6 doz.



"MAYDEW" BRILLIANTINE (SOLIDIFIED)
In Decorated Oval Tin. As illustrated ... 4/6 doz.

STANDEN & PERKS GREAT LISTER ST.,
BIRMINGHAM.

Maw's Page



Users of Meritor Toothbrushes Are Enthusiastic About Them

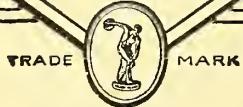
Are *you* enthusiastic about Meritor toothbrushes? You should be. There are a number of very good reasons why the pharmacist should be vitally interested in pushing Meritor toothbrushes.

The supreme efficiency—the splendid performance of the Meritor toothbrush is alone sufficient reason for wanting to sell it, because an efficient article brings credit to your reputation. But there are also many other good reasons.

There is the guarantee to replace the brush if it fails to give satisfaction. Surely a guaranteed brush makes selling easy. Then there is the striking carton which displays so well in your window or on your counter—there is the original and widespread press advertising—there is the generous and effective display matter which we supply with Meritor orders—and there is that unalterable fact “sold by pharmacists only.”

*Stimulate enthusiasm for Meritor and you stimulate your own business.
A Meritor toothbrush will bring you goodwill and repeat orders.*

S. Maw, Son & Sons, Ltd.,
Aldersgate St., London,
and Barnet.



Telephone:
City 7
Private
Branch
Exchange

Telegrams:
Eleven
Cent
London

Cables: **Eleven**
London
Code: **A.B.C.**
4th & 5th
Edition

ALKIA SALTRATES AND REUDEL BATH SALTRATES

The extreme height of perfection in salines. The best that can be produced regardless of cost. (3/3 P.A.T.A.).

The best of all bath preparations, either for medicinal or general toilet use. (2/- and 3/3 double size P.A.T.A.).

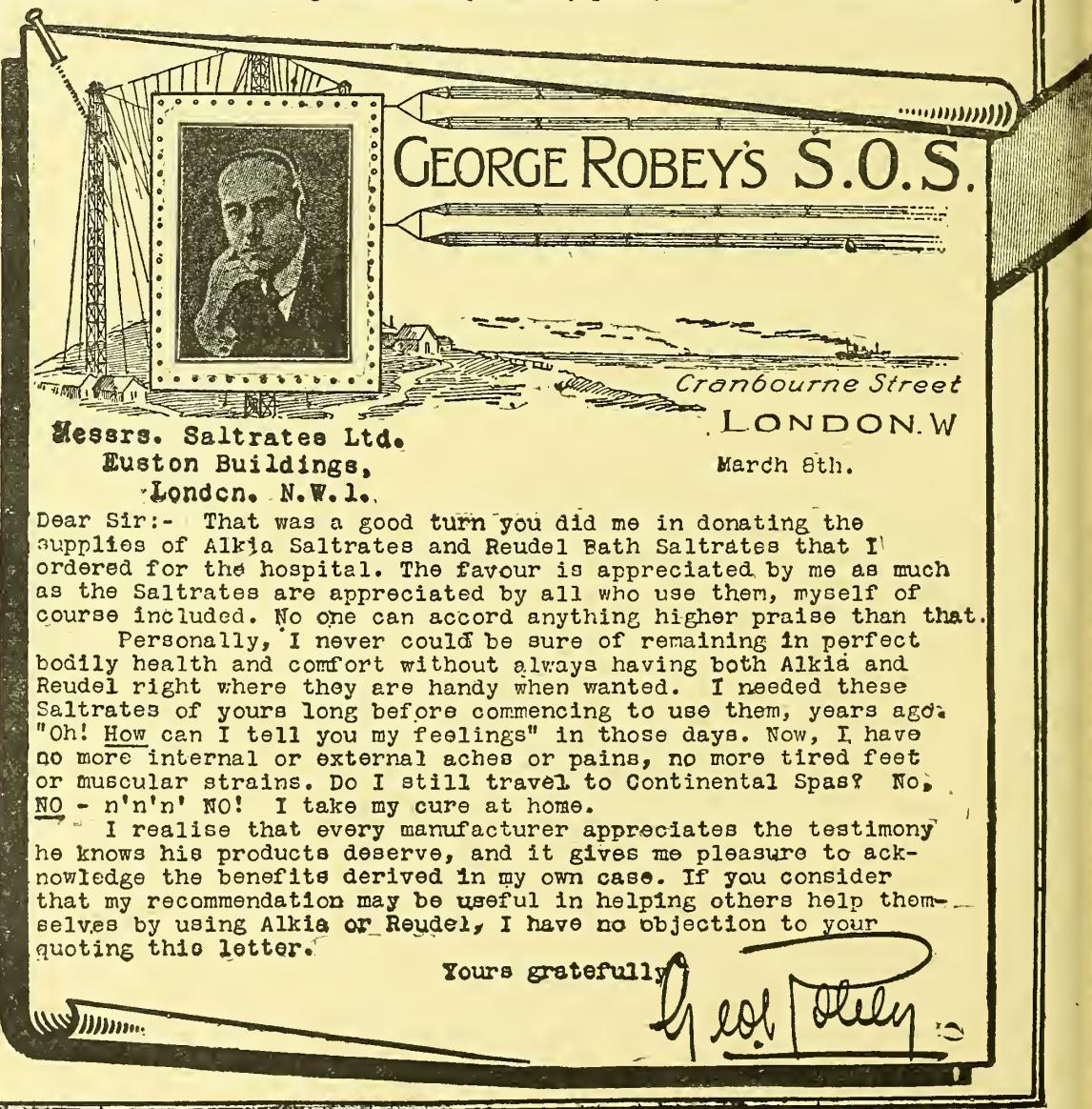
They never stay long on your shelves, because they please the customer EVERY TIME.
Never Let Your Stock Run Too Low.

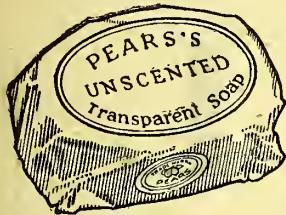
NO STOCK — NO SALES.

A LETTER THAT EVERY CHEMIST SHOULD READ.

"Do I still have to travel to Continental Spas?
 No, NO—n'n'n' NO. I take my cure at home,"

Says **GEORGE ROBEY**, the inimitable comedian, who like Sir Harry Lauder and numerous others amongst the really great stars of the theatrical firmament, has joined the long list of prominent men and women who have used our Saltrates with results so pleasing that they have kindly written us in grateful acknowledgement of the wonderful benefits derived. No other preparations in the world have ever received such endorsement. The following letter is here reproduced by special permission. **SALTRATES, LTD.**





Pertinent PARS

for
PHARMACISTS

Modern manufacturing is on so large a scale that it is impossible to stock everything and difficult to know what to accept and what to refuse.

Plenty of manufacturers do little or nothing to help the Pharmacist after he has given his order. This is bad policy.

Select your stock from among those manufacturers who, like the makers of Pears' Unscented Transparent Soap, study your interest, and do all in their power to help you clear the goods they sell you.

Pears

71-75, New Oxford Street, LONDON, W. C. 1.



EUCRYL

DENTURE POWDER

T

THERE is a big field for new business in a powder for artificial teeth at the right price. Many thousands who have to wear dentures are only using salt and water or coarse soap powders, and these are woefully inefficient.

Display on your counter EUCRYL DENTURE POWDER and the small card sent with it, and you will find a very ready sale and real new business.

NEW PACKING IN ATTRACTIVE TINS

to retail at 7½d.

ON USUAL GENEROUS BONUS TERMS

EUCRYL LIMITED

SHIRLEY SOUTHAMPTON

Nature withstands Invention

THE POPULARITY OF SPONGES
FORMED IN NATURE'S WAY IS
NOT DIMINISHED, IN SPITE OF
EFFORTS TO PRODUCE A SUBSTI-
TUTE BY MEANS OF FERMENTED
RUBBER.

NEW SEASON'S SPONGES

direct from the Mediterranean Sea

show fine value, and have great imbibing properties which is an indication of their texture, softness and power of remaining fresh and clean in use.

SPECIAL OFFER of HONEYCOMB SPONGES in *free* cases.

A	Wooden Case, containing 100 pieces at 4½d.	..	..	per case	£1 17 6			
B	" "	100	9d.	"	£3 15 0					
C	" "	50	4½d.	{ ..	£2 16 3					
D	" "	50	9d.	{ ..	£4 7 6					
E	" "	50	1/-	{ ..	£6 11 3					
	" "	25	1/6	{ ..						
	" "	25	1/9	{ ..						
F	Bath Honeycomb	6	2/6	{ ..						
	" "	6	3/6	{ ..						
	" "	4	4/6	{ ..	£3 15 0					
	" "	4	5/6	{ ..						
Honeycomb	Nos.	1	2	3	4	5	6	7	8	9
(loose)	per doz.	2/9	4/6	6/6	8/6	10/6	16/-	20/-	24/-	30/-
Honeycomb	Nos.	10	11	12	12a	14	15	16	17	
(loose)	per doz.	36/-	42/-	52/-	60/-	72/-	84/-	126/-	162/-	

AYRTON, SAUNDERS & CO., LTD.

34 Hanover Street



LIVERPOOL

IN THE
PAST—PRESENT—FUTURE

The World's premier firm for

GINGER

Finest Imported Jamaica Ginger

GINGER

Genuine Ground Gingers

GINGER

Soluble Essence of Jamaica Ginger

GINGER

Concentrated Ginger Ale Essences

GINGER

Concentrated Ginger Beer Essences

GINGER

Concentrated Ginger Wine Essence

GINGER

Concentrated Ginger Wine Extract

(in bulk or in cartons for resale)

GINGER

Exquisite Ginger Wine Compound

GINGER HULL

—Our Telegraphic Address—

WRITE FOR PRICES, SAMPLES, RECIPES, &c., TO

WILLIAM HAY, LIMITED

Ginger Specialists

Head Office :

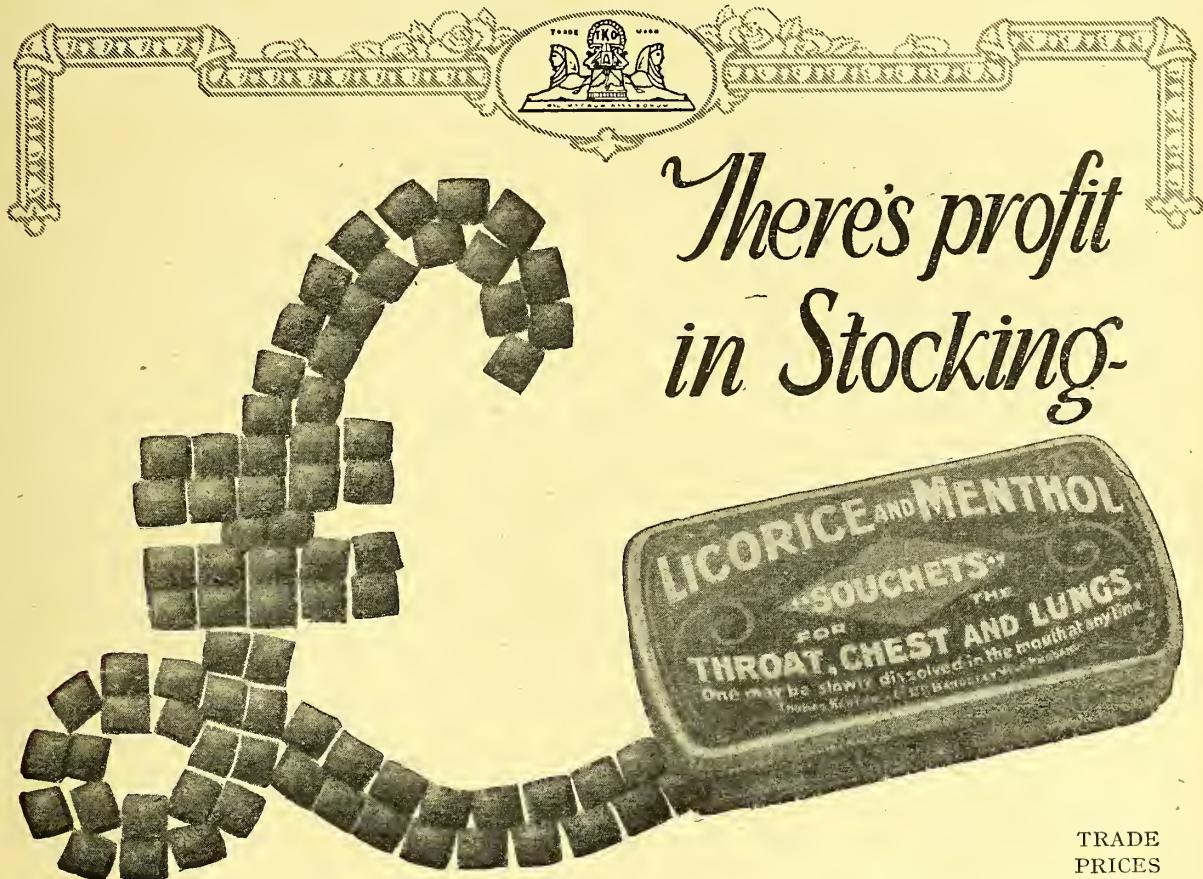
WALMSLEY STREET,
HULL.
Tel.: Central 6488.

Telegrams:

"Ginger, Hull."
"Bushworth, London."

London Branch :

3 Browning Street,
Walworth Road, S.E.17.
Tel.: Hop 2753.



The profit that is worth while.

BUSINESS Profit is not alone an affair of percentages or of the margin between cost and selling price. Percentages are meaningless things unless attached to actual sales—or in other words, it is Goodwill alone that can turn a profit "margin" into a balance at the bank.

¶ It is easy to sell most commodities "once round," but after that comes the testing time, when quality and efficacy rather than margins of profit decide the future outlook.

¶ Licorice and Menthol Souchets, like all products of the House of Kerfoot, combine a satisfactory profit margin with the quality and reliability which bring repeats and build up Goodwill for the future.



TRADE PRICES

6d. tins ...	3/9 dozen
(Gross lots	3/7½ doz.)
1/- tins ...	7/6 dozen
Bulk	4/6 lb.

THOMAS KERFOOT & CO LTD
BARDSLEY VALE, LANCASHIRE,
& Bardsley House, London, N.1
ESTABLISHED 1797.

A/165

COPYRIGHT

ALL-SOLUBLE GOLD SEAL SUPER FLAVOURINGS

GINGER JAMAICA
GINGER WINE
DRY GINGER ALE,
"Kenilworth"
GINGER ALE, "Belfast"
LEMONS GREEN
LEMONS TRIPLE
LIME JUICE & SODA
ORANGE SWEET
ORANGE BITTER
BLACK CURRANT
PORT FLAVOUR
CAPSICUM
AND OTHERS
also
CLOUDY
STONE GINGER BEER

*None equal for Flavour,
Solubility, and Concentration*

Below Present Current Trade Rates

All-Soluble Essences supplied in Bond for Export.

WRITE FOR SAMPLES AND PRICES

Clayton & Jowett

LIMITED.

*Essence Distillers,
Food Colour Specialists*

LIVERPOOL

Managing Director : J. W. CLAYTON, Ph.C., F.C.S.

ESTABLISHED 1845

Look out for our Coloured Inset
in the "Chemist & Druggist" Diary



BRAND'S ESSENCE

of Beef, Mutton or Chicken
consists solely of the juice of
the finest meats, prepared
with the greatest care under
the most hygienic conditions.

Essential in the Sick Room.

Sold by all Chemists and Stores.

BRAND & CO., LTD.

Mayfair Works, Vauxhall, LONDON, S.W.8.

MAJAX

The ideal milk sugar for babies. We are
having direct orders from all parts of the
country. Why not participate in this business?

For terms write to Proprietors

MAWSON & PROCTOR, LTD.
NEWCASTLE-ON-TYNE.

NURSE HARVEY'S MIXTURE

A safe, simple, and reliable remedy for Children's
Ailments is advertised so extensively in the daily
and weekly Press as to bring mothers to the
retailer without effort on his part.

The selling has been done before the mother
reaches the chemist, and, having supplied her, it is
only common sense to claim she will buy other
family necessities from him. Moreover, the retailer
has a profitable return on a quick turnover.

For Direct Terms apply to—

OSCAR SCRUTON & CO., YORK

**D^r HALE'S
VIN-SANGUIS
WINE FOR THE BLOOD**

Fountain of Health

If you have a Wine License we will pay the fee.

If not, get one, we will pay.

Send for any further particulars.

PROPRIETORS OF
DR HALE'S VIN-SANGUIS
Transcontinental Agencies Ltd
14, Southampton St., London, W.C.2
MADE WITH OLD DOURO PORT



Saint-Raphaël

Tonic, Restorative,
Digestive Wine.

Known throughout the World,
and prescribed in all cases of
ANÆMIA, DEBILITY, and CON-
VALESCENCE, to Young Women,
Children and the Aged.

DOSE : One wine-glass after the
two principal meals.

Recommended by—
PROF. BOUCHARDAT, Professor of
Hygiene, Paris Faculty of Medicine.
DR. MACNAUGHTON JONES, London,
England.

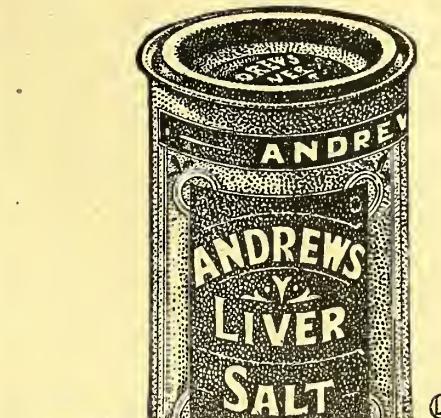
"For more than thirty years St. Raphaël Wine has been exclusively prescribed, with success, in the Paris hospitals as a pure tonic, by eminent physicians, such as Magendie, Ros on Chomel, Velpeau, Redon, Monneret, Trouseau, Grisolle, Laennec, &c.—*Union Médicale*, May 8 and June 12, 1873.

"The 'Vin de St. Raphaël' is often used for ladies nursing their own children; it is preferable to stout, which creates an unhealthy fat."—*The Lancet*, London, England.

"St. Raphaël Wine is most precious in all cases where it is necessary to give tone to the system, without effort or shock."—DR. C. DES BARRES.

Cie du VIN SAINT RAPHAËL, Valence, Drome,
FRANCE

To be obtained from all
Wholesale Druggists.



Andrews Message to the Trade

For 1924 Andrews has a typically progressive message to the Wholesale and Retail Trade. Fully descriptive Circulars have been posted to our Customers giving details of the many "live" and trade-building selling aids which we are introducing during the current year.

If you have not received your Circular, write to the address below for a copy.

1923 for Andrews was a record year and 1924 promises to be even better.

Every effort on our part is being made to lift Andrews still another notch higher—in the esteem of the public and in its attractiveness to the Trade.

Do not fail to secure a copy of the Andrews message to the Trade; it will show how you can share in the profits (there are special bonus terms) and in the increased business which our 1924 campaigns cannot help but attract.

ANDREWS LIVER SALT

Those who are non-stockists and wishful to open an account with us only need to write for full particulars to the address below to make the first step towards a generous profit return.

SCOTT & TURNER, LTD.
Gallowgate, Newcastle-on-Tyne.

QUALITY MAKERS of
Malt Ext. and
 All packings. **Malt & Oil**

C. Tolkien & Co.

Established 1886.

Factory & Maltings — Apollo Works,
 Offices & Warehouse—Commercial Mills,

Blackburn.

BELFAST—31 Antrim Road.

Dr. DE JONGH'S
 LIGHT BROWN
COD LIVER OIL
 IN IMPERIAL HALF-PINTS, 4/-

ANSAR, HARFORD & CO., LTD.
 182 Gray's Inn Road . . LONDON
 SOLE CONSIGNEES.

Cater for Diabetics by selling
 Real French **Gluten Bread** Brusson Jeune
Cie "Sona"
Gluten Flour, Macaroni, Vermicelli, Semolina, &c.
 Showcards and Window Bills Free. Usual Wholesalers, or write—
 O. WELLS, 1 Manor Rd., Brockley, London, S.E.4

BOOKS FOR PHARMACISTS.

Send us a postal card and we will send you a 32 page catalogue of professional and business books for pharmacists, and a copy of

"THE SPATULA"

an illustrated monthly magazine for druggists, full of American snap and enterprise.

THE SPATULA, BOSTON 14, MASS., U.S.A.

ATKINSON & BARKER'S
INFANTS' PRESERVATIVE

THE BEST AND SAFEST INFANTS'
 MEDICINE OF OVER 120 YEARS' STANDING.

Prices and Terms on application to R. BARKER & SON, Ltd.
 13 Wesley St., C.-on-M., MANCHESTER.

DOES
 NOT
 CONTAIN
 any
 SCHEDULED
 POISON.

Reduction of Prices

Important Note
 to Chemists
 without Licenses

It has been established by law that Registered Chemists may sell Wincarnis with Quinine without a License.

WINCARNIS

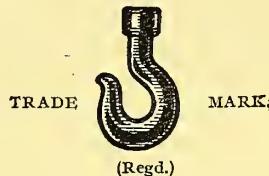
Sells readily ALL
 the time.

COLEMAN & CO., Ltd., Wincarnis Works, Norwich.

New Prices to
the Public:

Large Size **5/-**

Small Size **3/-**



The Advertising of Hooker's

is steadily creating a "consumer demand," which becomes a source of profit to you in so far as you co-operate with us in increasing that demand.

Experience has taught us that a regular custom for HOOKER'S can soon be created. That is why we are advertising so widely. You will get profit from that advertising, regular weekly profit too, by putting a little effort into selling HOOKER'S.

As you know, you can confidently recommend HOOKER'S. Customers who take it in the first instance on your recommendation will come back for it because of its delicious flavour and beneficial qualities.

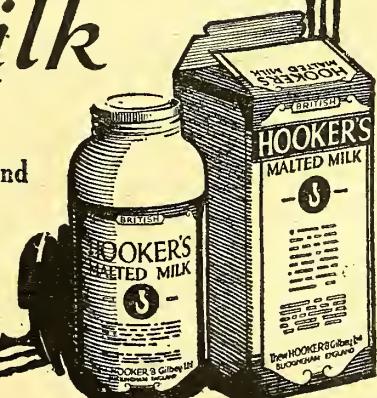
Enterprise in business is always necessary, but doubly profitable when used to build up regular custom in an article that is and will be widely advertised.

HOOKER'S

Malted Milk

Write for prices and trade terms to

Thew, HOOKER & Gilbey Ltd., Buckingham, England





OF PARTICULAR IMPORTANCE TO THE MEDICAL PROFESSION

An extraordinarily comprehensive stock unrivalled as to quality and quantity of
SURGICAL INSTRUMENTS **X-RAY & ELECTRO-MEDICAL APPARATUS**
PATHOLOGICAL APPARATUS **DRUGS AND MEDICAL SUNDRIES**
DENTAL STORES & INSTRUMENTS **BY ALL THE LEADING MAKERS**

SOME ITEMS OF SPECIAL INTEREST:

Hypodermic Cases	... ...	8/6 each	Doyen's Intestinal Clamps	... 5/6 to 8/6 each
I. R. Bandages, Martins'	... ...	5/- each	Dental Lathe Brushes	... 5/6 per dozen
Porcelain Evaporating Basins, 2 in. to 10 in. ....	... ...	6d. to 4/- each	Enamelled Kidney Basins, 8 in. to 14 in. ... ...	... 8/- to 1/2 each

These Stores represent the balance of the surplus stock of H.M. GOVERNMENT DISPOSAL BOARD and are now offered for sale by

GEO. COHEN & ARMSTRONG DISPOSAL CORPORATION

to whom all enquiries should be addressed at

MEDICAL STORES DEPARTMENT, C.S.D. Depot No. 5,
Wood Lane, Shepherd's Bush - - - LONDON, W.12

Telephone: Park 5303 Ext. 25.

Telegrams: "Medstrong, Shepherd's, London."

Trade Report — Tablets.

Please note the following alterations in prices:—

		Per Doz.	Bots.	Per	
		25's.	50's.	100's.	1000
AMMONIATED QUININE, 1/2 DRM.	{ WHITE OR RED. S.C.	4/6	7/-	11/-	6/6
" "	{ 1 DRM. { OR C.C.	5/9	9/-	15/6	10/-
ASPIRIN, 5 GR.		4/-	6/-	9/6	4/9
CASCARA SAGRADA EXT., 2 GR.	PLAIN. S.C. OR C.C.	3/6	5/-	7/9	3/6
PHENACETIN, 5 GR.		5/6	9/-	15/-	9/6
PHENACETIN, 4 GR. CAFFEINE CIT. 1 GR.		5/9	9/6	16/-	10/6
VEGETABLE LAXATIVE, s.c.		4/9	7/3	12/-	7/-

3d. per dozen less on gross quantities.

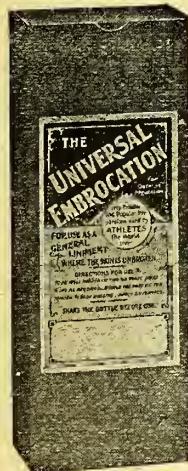
H. & T. KIRBY & Co., Ltd.,

Newman House, Willesden Green, London, N.W. 2.

LORIMER-MARSHALL

for

PACKED GOODS



THE UNIVERSAL EMBROCATION

A special Embrocation for Athletes and for general use.

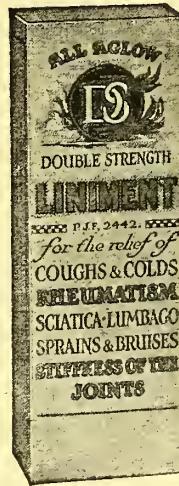
4-oz. plug-stoppered Flats 8/- per dozen.

DOUBLE STRENGTH LINIMENT

" ALL AGLOW."

Oils of Camphor and Amber, with Capsici and other Rubrifacients.

Nicely Cartoned 3-oz. Mexicans 9/6 per dozen.

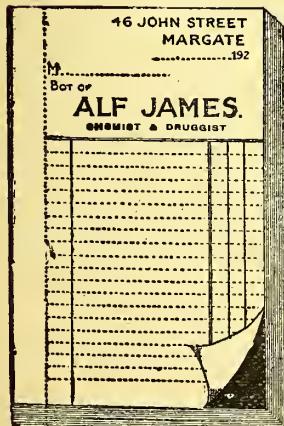


LORIMER-MARSHALL, Ltd., 12 Tower Hill, LONDON, E.C.3

You never know

what may happen by not keeping a duplicate copy of *all* your correspondence. It's so easy to do this with the "Charterhouse" Duplicate Order or Memo Book which is made only with 100 printed tear-outs 8 by 4½, and 100 plain duplicates. 1st leaf, good white bank paper, printed any ordinary heading, and perforated. 2nd leaf, white paper, plain and fast. Wired binding, stout Kraft flush paper covers; one sheet of carbon per book.

The "Charterhouse"
Duplicate Order or Memo Book



Saves time, money and trouble. Each sheet is numbered so as to give an accurate record.

Prices per Book:

12 books ...	1/9
24 "	1/8
36 "	1/7
48 "	1/6
72 "	1/5
144 "	1/4

Numbering in duplicate, 3d. extra per book.

These books can also be had with Cash Lines at same prices.

J.C.KING LTD.

42-60 Goswell Rd
LONDON, E.C.1.

WATERGLASS

(140° TW :)

In 1, 2, 4 and 7 lb. TINS

SMARTLY LABELLED.

Please apply for Quotation
(WITH SPECIMEN LAPEL).

NEWBALL & MASON
NOTTINGHAM.

TRADE MARK



Parfumerie De l'Isle Notre Dame

FLORAL OILS

(CONCENTRATED)

FOR THE PREPARATION OF BRILLANTINES

Highly perfumed oils which can be diluted down to the required strength with pure Mineral Oil.

The odours are extracted direct from the flowers by our special "Enfleurage" Process, and are exact reproductions of the actual flower odours.

They are remarkable for their fineness of quality, and never become rancid.

They can be supplied in any floral odour :

HELIOTROPE	ORANGE
JASMIN	RESEDA
JONQUILLE	ROSE
LILY	TUBEROSE
VIOLET, etc.	

Prices and Samples on application.

SPURWAY ET CIE, LTD.

89 Great Eastern Street,
LONDON :: :: E.C.2.

Factories & Distilleries :
CANNES-GRASSE, RIVIERA.
Technical Laboratories : PARIS.

LEIPSIC NEW YORK
KINGSTON (ONTARIO)

Telegrams - "NEROLI, LONDON."
Telephone - - BISHOPSGATE 1372.

ESSENCES

HIGHEST CONCENTRATION.

Sole Agents for Gt. Britain and Colonies

FRIES & BRO. NEW YORK

*The World-Renowned Makers of
FIRST QUALITY ESSENCES.*

Stocks in London. PEACH APRICOT HONEY MAPLE &c.
Ask for Quotations & Samples.

A. CONNELL & CO., Melba House,
WENLOCK ROAD, CITY ROAD, LONDON, N.1
Phone: Clerkenwell 7266. Tele.: "Nitrozone, Ald. London."

LINES THAT SHOW GOOD PROFITS

Taylor's CIMOLITE PREPARATIONS



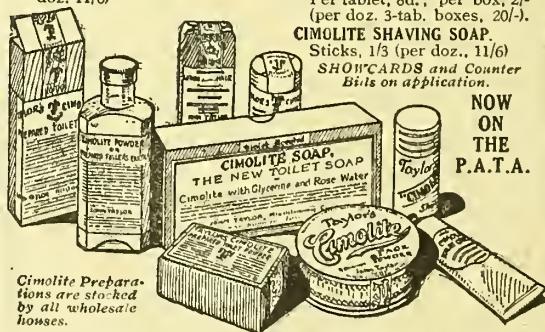
50 YEARS' REPUTATION.
Used in all Royal Nurseries and by the Nobility.

CIMOLITE TOILET POWDER.
Boxes, 1/1½ (per doz. 9/6).
Tins, 3/-, 5/6, 11/- (per doz.
27/-, 49/3, 96/-).
Bottles, 3/3. 6/6 (per doz.
30/-, 55/6).

CIMOLITE TOILET CREAM.
Collapsible tubes, 1/3 (per
doz. 11/6).

CIMOLITE SOAP (Violet-Scented)
Per tablet, 8d.; per box, 2/-
(per doz. 3-tab. boxes, 20/-).

CIMOLITE SHAVING SOAP.
Sticks, 1/3 (per doz., 11/6)
SHOWCARDS and Counter
Bills on application.



NOW
ON
THE
P.A.T.A.

ATTRACTIVE SHOW CARD obtainable from
all wholesalers or direct.

PREPARED ONLY BY
JOHN TAYLOR, Manufacturing Chemist
30 BAKER STREET, PORTMAN SQ., LONDON, W.1



200 YEARS

*Continual demand
for the Original!*

Times change, but as long as Eau de Cologne is used, so long will there be a demand for the Genuine and Original Johann Maria Farina.

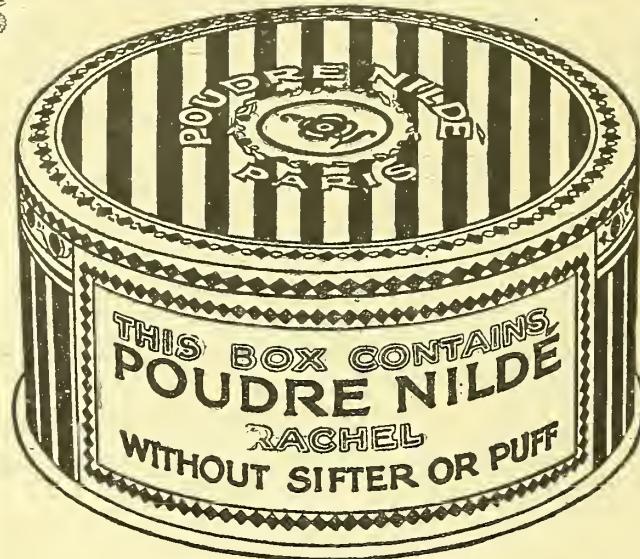
Its name is so well known by all classes—from Royalty downwards—that it only has to be displayed to find a ready sale.

Write to-day for special terms to the Sole Importers.

The
Genuine & Original
EAU de COLOGNE
ESTABLISHED 1709.



BLACKALLER & PLEASANCE, 8 Laurence Pountney Hill, Cannon Street, London, E.C.4.



*for the dressing
table in the new
large box*

without sifter or puff

1/6

Made in six shades.	
RACHEL	Handbag
NATURELLE	size
BLANCHE	1/-
ROSE	Medium
BASANÉE	2/-
INDIENNE	Large
	3/6

Leather or fancy embroidered vanity cases with mirror in lid.

Small size, Medium,
5/- 7/6
Large, 10/-

**All Nildé preparations
show 33½% profit on
selling price.**

Poudre Nildé

in the sifter box

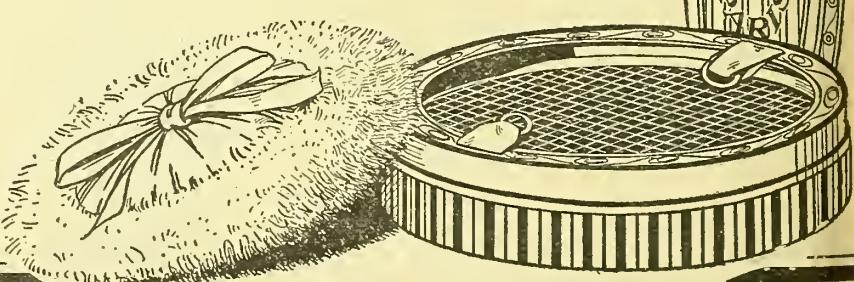
"The kind of line I like to handle."—A retailer's comment.

"Poudre Nildé," he said, "was one of the steadiest sellers of all lines he carried. Women have less money to spend in these days, consequently they spend more wisely. Poudre Nildé is the only powder complete with sifter box and puff that they can buy for 1/-—and the sales are going up every week. I get new customers partly through my window and counter displays, and partly through the advertising; but personal recommendations have as much to do with it as anything else. A business can be built up on personal recommendations—and that's why I like to sell Poudre Nilde."

**SOLE AGENTS. NILDÉ (Paris) AGENCY LTD.
296, Regent Street, London, W.1**

Phone : Mayfair 5282.

Every box
contains a
puff.





NILDÉ lip salves

in elegant metal containers

White 9d.

Rouge or Carmine 1/-

SOME customers you see once and never see again. But women who purchase Nildé lip salves — and other Nildé preparations — are not haphazard buyers. They choose the goods, and they choose the shop—and they keep to both. When they come to you for Nildé goods, it is because they know they can rely on the name Nildé—and on you.

*All Nildé preparations
show 33½% profit on
selling price.*

Sole Agents :

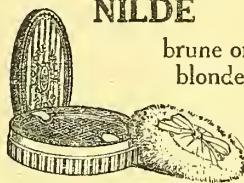
NILDÉ (Paris) AGENCY Ltd.
296, Regent Street
LONDON, W.1.

Phone - - - Mayfair 5282.

Other Nildé preparations

ROUGE INVISIBLE NILDÉ

brune or
blonde.



In the sister box with puff 1/6

CRÈME DE BEAUTÉ NILDÉ

blanche or
naturelle,

2/-

Large size,
3/-



SAVON NILDÉ

The creamy lather
soap Price 1/-

Cartons containing
3 tablets - 3/-





ATTRACTIVE SHOWCARDS SUPPLIED.

**OTHER
“SPECIALTY” PRODUCTS**

Petroleum Jelly—Cold Creams—All B.P.
Ointments—Cocoanut Oil—Petroleum Emulsion—Cod-Liver Oil Emulsion—
Pectoral Petroleum Emulsion.

**“Specialty”
Brilliantines
and
Toilet
Paraffins -**

will satisfy your customers—and satisfied buyers are regular customers. As one of the largest importers of petroleum products, we are able to quote exceptionally attractive prices, while maintaining the highest possible standard of quality.

“Specialty” Brilliantines and Toilet Paraffins are supplied in a wide variety of high-quality perfumes to the retailer's own choice.

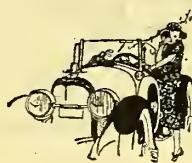
Send for samples and latest price list and prove these facts for yourself.

**“SPECIALTY” DEPT.
ANGLO-AMERICAN OIL CO., LTD.**

Telegrams:
“Nufinjol, Norwest
London.”

**Albert Street,
Camden Town, London, N.W.1**

Telephones:
Hampstead 4046
and 4047.



MORE BUSINESS THIS YEAR

LET NINETEEN TWENTY-FOUR BE A RECORD YEAR . . . MAKE IT THE BEST IN THE HISTORY OF YOUR BUSINESS . . . THE TRADE IS THERE IF YOU WILL GO AFTER IT

THE TOILET SERIES OF EXCEPTIONAL MERIT



MANY are the merits of the Elfrida Series, and we shall never tire of telling the pharmacists about them. A quickly increasing number of our friends are really proving every day the truth of what we say, but there are still one or two who have not yet realised what the Elfrida series can do for them—how different they are from the usual run of toilet preparations.

One difficulty lies in the fact that although we know, and many chemists know, how good the Elfrida series is, we cannot do more than tell you about it. There is one way, however, of actually proving what we say, and that is for you to sell them.

So you see, it is up to you; we can assure you that it will be one

of the best bits of business you have ever done, once you start to sell Elfrida.

The series has recently been made more attractive by the addition of several splendid new lines such as Parfum, Face Powder, etc., and the profit to you is better than ever. The series bring you an average profit of 80%, and all show matter that is necessary to sell your stock is sent free.

The quality is of the highest, both with the product and with the pack. The window display is an excellent example of what can be done in the way of customer attraction. Then—the turnover, rapid all the year round, and your profit—the best ever. The prices—all on the P.A.T.A., are within reach of all your customers. Make a display now, it will help you make 1924 a record year.

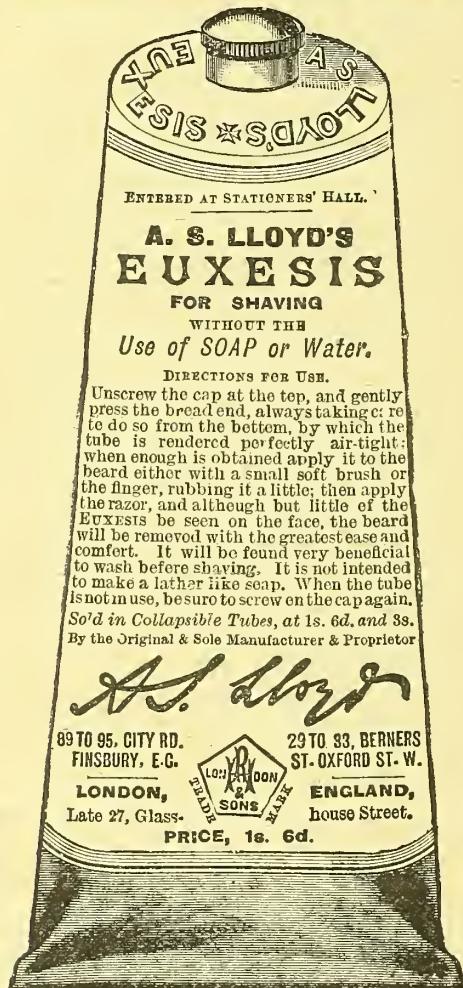


Write us for full particulars—W. B. CARTWRIGHT, LIMITED . . . RAWDON, NEAR LEEDS



A. S. LLOYD'S EUXESIS (THE GENUINE).

For Shaving without Soap, Water, or Brush.



Sold by all Perfumers and Chemists throughout the World.

R. HOVENDEN & SONS having purchased, under an administration suit, the Business of the late A. S. LLOYD, with the Receipt, Trade-Mark, and Goodwill of the celebrated Euxesis, the Trade are cautioned that the original and genuine Euxesis is now manufactured at our Factory ONLY and may be obtained at either of our Warehouses.

PRICES ON APPLICATION.

NOTICE.—THE GENUINE A. S. LLOYD'S EUXESIS bears a label printed in BLACK only on a Yellow ground, with our Trade Mark at the bottom, as Illustration.

Proprietors : R. HOVENDEN & SONS, LTD.
LONDON: 29-33 Berners Street, W.1; and 89-95 City Road, E.C.1

DEARBORN (1923) LTD.

37 Gray's Inn Road,
LONDON, W.C.1.

Toilet Specialties.

	Price per doz.	Selling Price to Retailer P.A.T.A.
PILENTA SOAP ...	10/-	1/-
A complexion soap.		
PROLACTUM ...	10/-	1/-
For the lips.		
PARSIDIUM JELLY ...	10/-	1/-
For wrinkles.		
ALLACITE OF ORANGE BLOSSOM ...	22/6	2/6
A dressing cream.		
BORANIUM ...	22/6	2/6
A hair tonic.		
CLEMINITE ...	22/6	2/6
For a face lotion.		
COLLIANDUM ...	22/6	2/6
For a face tint.		
PERGOL ...	22/6	2/6
A deodorant.		
TEKKO PASTE ...	22/6	2/6
Camphor cream.		
STALLAX ...	22/6	2/6
For a shampoo.		
JETTALINE ...	31/6	3/6
For clearing the skin.		
PHEMINOL ...	36/-	4/-
A depilatory.		
MENNALINE ...	36/-	4/-
For the eyelashes.		
MERCOLIZED WAX ...	31/6	3/6
A face cream.		
STYMOL ...	36/-	4/-
For oily complexions and blackheads.		
SILMERINE ...	22/6	2/6
Hair-curling fluid.		
BARSYDE ...	22/6	2/6
Dandruff eradicator.		
TAMMALITE ...	22/6	2/6
For grey and faded hair.		
LIQUID PERGOL ...	31/6	3/6
To check excessive perspiration locally.		
BICROLIUM ...	22/6	2/6
For whitening the hands.		
COCONOIDS ...	31/6	3/6
For figure development.		

The Products of

Messrs. PARKER, BELMONT & CO.

CLYNOL BERRIES	{	36/-	4/-
For obesity.		58/6	6/6
SOFT PALERIUM...	...	45/-	5/-
For wrinkles.			
LIQUID NAIL POLISH ...	10/-	1/-	
Brilliant and lasting.			

Stocked by ALL Wholesale Houses.

COLONIAL DEPOTS AND AGENCIES.

Australia: ALL WHOLESALERS, & DEARBORN (Australia), Ltd., Grace House, Clarence Street, Sydney.
South Africa: LENNON Ltd., Cape Town, etc.
India: FRAMJEE & SON, Bombay.
New Zealand: SHARLAND & CO., Auckland & Wellington.
South America: DEARBORN (South America) Ltd., Callao, Salta 264, Buenos Aires.
Straits Settlements & Federated Malay States: MEDICAL HALL, Ltd., Singapore.

A. S. LLOYD'S EUXESIS.

For Shaving without Soap, Water, or Brush.

CAUTION.

The Labels on GENUINE EUXESIS bear two signatures—
A. S. Lloyd in Black Ink, and that of his Widow,
Aimée Lloyd, in RED. Refuse any other.

*Sole Manufacturers and
Proprietors:*

AIMÉE LLOYD & CO.
23 PANTON STREET (formerly named Spur Street),
HAYMARKET, LONDON, S.W.

N.B.—When ordering from Wholesale Houses write LLOYD'S EUXESIS (WIDOW'S).

The 'ESSENFLOUR PRODUCTS Ltd.'

*Distillers of Essential Oils and
Manufacturers of Perfumery Products*

MYSORE - - S. India

have been appointed Sole
Consignees and Distributors of

MYSORE GOVT. SANDALWOOD OIL

Satisfying all pharmacopœia and possessing an excellent aroma.

*Samples and prices will be readily supplied
on application to our correspondent at*

'PERFUME HOUSE,' 6-8 Beauchamp Street, London, E.C.1

Telephone : HOLBORN 2499.

Telegrams : "EKDUM LONDON."

YOUR PROFITS ARE OF VITAL INTEREST

and a further source is always welcome. For your purpose one of the most lucrative lines now on the market is NUCTONE, the new scientific preparation for restoring the colour to Grey Hair.

With your experience you know that thousands of grey haired people are anxious to restore the colour to their hair but will not use an instantaneous hair-dye.

NUCTONE is quite different. It restores the colour gradually but permanently by the natural action of light and air. This saves all embarrassment. A few greying strands can be just as effectively treated as the whole head of hair and washing does not affect it. NUCTONE gives additional lustre and also has a tonic effect on the hair.

You have here a line of great selling possibilities which can be developed just by your recommendation to the right customers, and in doing this you are fully protected by our guarantee that NUCTONE is harmless and is free from any ingredients that will injure the skin or hair.

Showcards and explanatory booklets for free distribution are furnished on request.

GUARANTEE

The Manufacturers guarantee that NUCTONE is absolutely free from any combination of lead and sulphur, and contains no ingredients that can possibly injure the hair. NUCTONE can therefore be recommended with entire confidence to your customers.

Nuctone for GREY HAIR

Retail Price 6/6 per bottle.
Price to you 52/- per doz.

In three grades:

NUCTONE for dark and medium hair.
NUCTONE ECLAIRE for fair & auburn shades.
NUCTONE CONCENTRE for Gentlemen.

Wholesale Distributors:

HENRY C. QUELCH & CO.
4-5 Ludgate Square, London, E.C.4

Manufactured by
STEWART, GOODALL & DUNLOP, LIMITED,
4 Dering Street London, W.1



STILL another Evan Williams Henna Shampoo that means more business.

The Evan Williams Camomile Shampoo is a shampoo specially prepared for fair hair. It gives a beautiful blonde tone and a brilliant tinge.

Stock the complete series of the Evan Williams Henna Shampoos —there is a grade for every kind of hair, and what is more you can guarantee they are **SAFE** to use —this is an important item to a woman.

It will pay you to stock the

EVAN WILLIAMS
Original Henna Shampoo

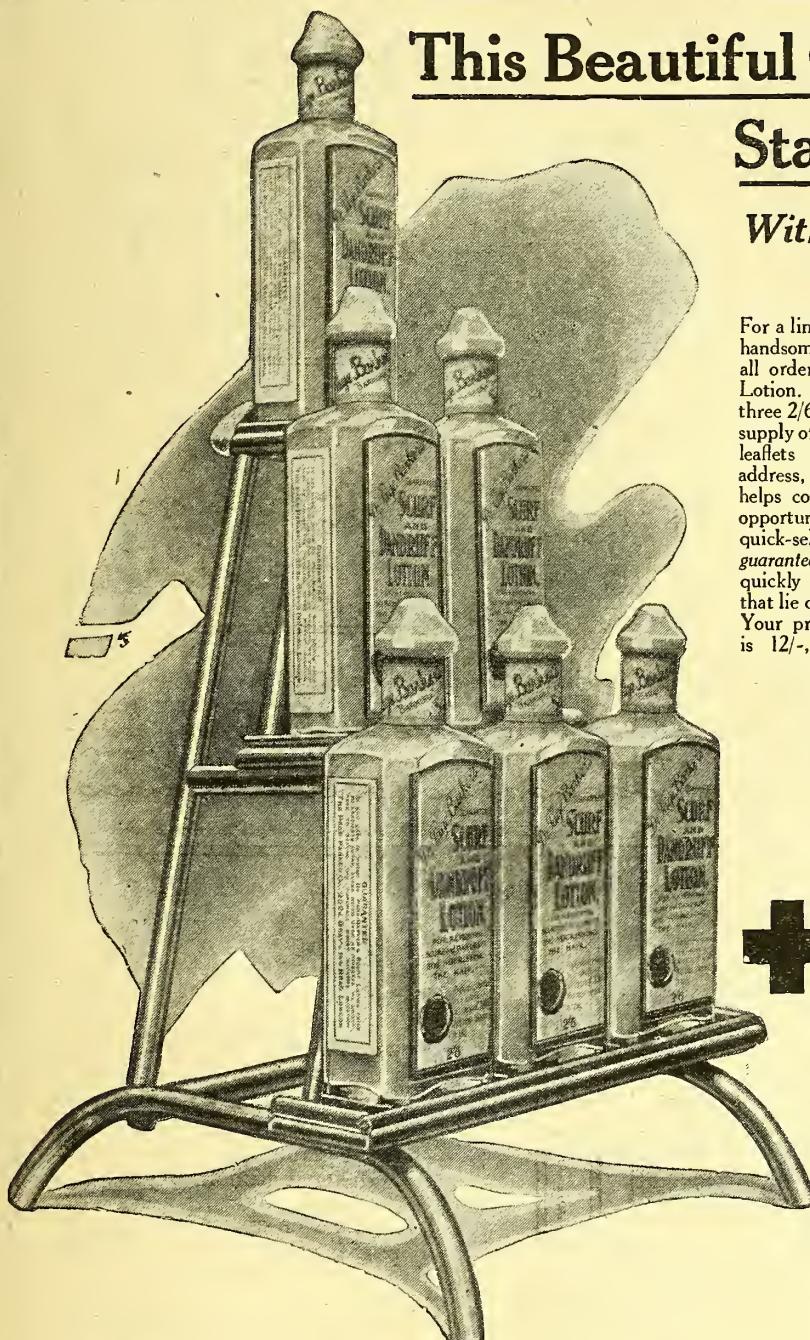
*Write for full particulars
of trade terms from*

The EVAN WILLIAMS CO., LTD.
14 Union Street, London, W.1

This Beautiful Gilt Display

Stand FREE!

*With Page - Barker's
Scurf Lotion*



For a limited period we will give one of these handsome Display Stands, as illustrated, with all orders of *Three Dozen* Page-Barker's Scurf Lotion. This is in addition to the free bonus of three 2/6 bottles. You also receive a generous supply of most attractive showcards and counter leaflets printed with your own name and address, and the lotion with all these selling helps comes to you Carriage Paid. Here is an opportunity for you to make a big display of quick-selling Page-Barker—the only lotion *guaranteed* to eradicate Scurf. You know how quickly displayed goods sell—how slowly those that lie on a shelf amongst other merchandise. Your profit on one dozen Page-Barker alone is 12/-, but note carefully that

An order for 3 dozen
Page - Barker shows you

£2 - 3 - 6
PROFIT

GUARANTEE.

We, the Ilex Supply Co., Ltd., 252b Gray's Inn Rd., guarantee that in any case in which Dr. Page-Barker's Scurf Lotion fails to remove and entirely eradicate scurf we will refund the purchase price in full.

**18/- dozen—
Retails at 2/6**

Distributors & Sole
Selling Agents :

**THOS. CHRISTY
& CO.,**

4-12 Old Swan Lane,
London, E.C.4

**Dr. Page-Barker's
Scurf & Dandruff Lotion**

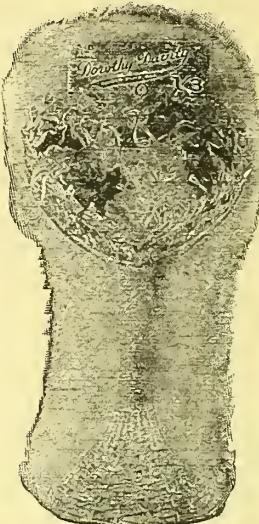
ANNOUNCEMENT!

We have recently pur.
**"DOROTHY
Powder"**

IN FUTURE THIS LINE WILL
BE RETAILED AT

6½d. each

(Silk Bag, assorted colour Powder
Block and Puff complete.)



chased the well-known
DAINTY"
Bag

INSTEAD OF

~~1/3~~ each

AS PREVIOUSLY

Terms to Wholesalers and Shippers with sample on application.

WILLIAMSON BROS., 126 Southwark St., LONDON, S.E.1

'Phone : HOP 3419.

**CHICAGO
HAIR
DYE**

INVENTED 1893.

One Bottle
Preparation.
Harmless to use.

IN FIVE SHADES:

Light Brown
Brown
Dark Brown
Black
Blonde

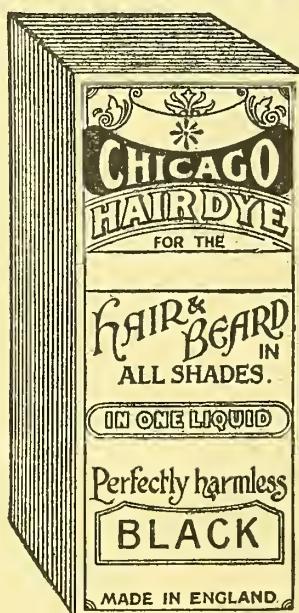
Retail 2/-

Cost 11/- per doz.

Profit over 100%
on cost.

Proprietors—

SINGLE, DALBY & CO.
42 Oldham Road, MANCHESTER



Gibbs

advertising is directed all the time to swelling the army of users. It is constructional advertising that brings new faces into your shop and additional cash into your till.

A litt'e co-operation on your part is all that is necessary.

An adequate stock of Gibbs preparations and an adequate display of them in your window is your certain route to new business.

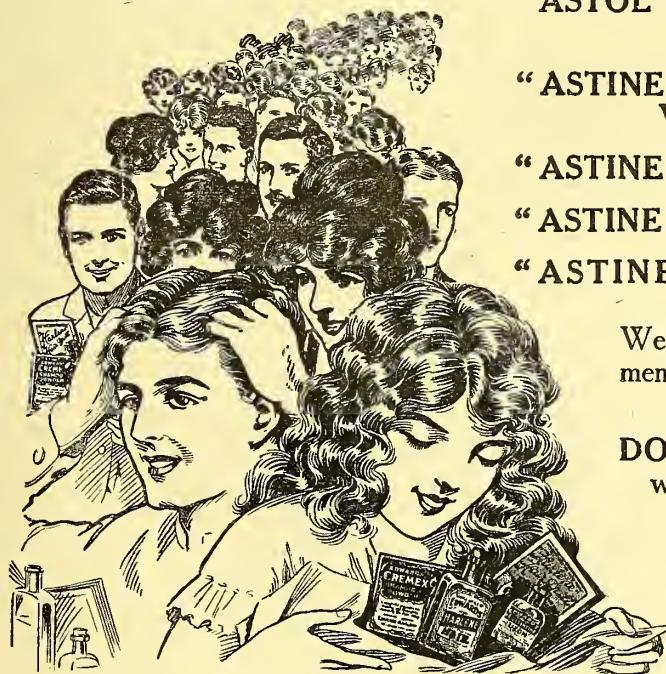
D. & W. GIBBS, LTD. (Dept. D.G.13)
City Soap Works - - London, E.1

**Toilet Articles are
"Best Sellers"!**

A MILLION FREE GIFTS
are making "Harlene" customers for YOU!

EDWARDS' HARLENE TOILET SPECIALITIES

FOR
30 YEARS
THE PREMIER
PREPARATIONS
FOR ALL TOILET
NEEDS



"HARLENE" FOR THE HAIR
"UZON" BRILLIANTINE
"CREMEX" SHAMPOO POWDERS
"ASTOL" FOR GREY HAIR
"ASTINE" VANISHING CREAM
"ASTINE" TOOTH CREAM
"ASTINE" SHAVING STICK
"ASTINE" NAIL CREAM

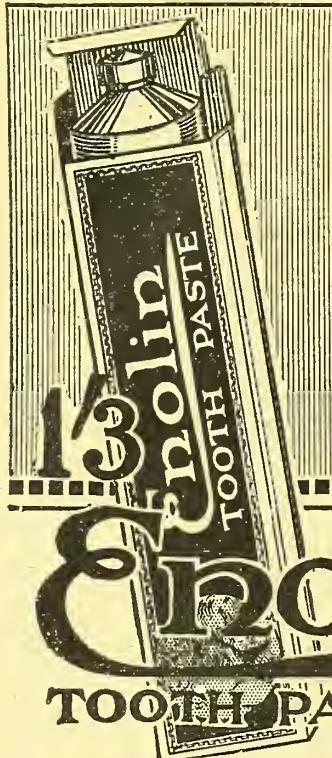
We have convinced millions of
men and women of the merits
of our products.

DON'T BE "SOLD OUT"
when they come to you.

**REPLENISH
YOUR STOCK
NOW**

FOR PARTICULARS, TERMS, ETC., WRITE—

EDWARDS' HARLENE LIMITED,
20, 22, 24 & 26 LAMB'S CONDUIT STREET, LONDON, W.C.1



To our Friends in the Midlands

We have appointed

Messrs. A. S. PRICE & CO., LTD.
Blackheath, Birmingham,

to be our *Wholesale Distributors* for the following Counties : WARWICK, WORCESTER, STAFFORDSHIRE, SHROPSHIRE, NORTHANTS, LEICESTER, RUTLAND, HEREFORD, GLOUCESTERSHIRE, NORTH OXFORDSHIRE. In order to ensure prompt delivery, will Chemists in those districts please obtain their supplies from Messrs. A. S. Price & Co., Ltd., as above. Phone : Cradley 174.

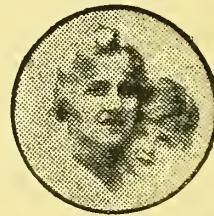
Window Display Terms on Application.

Manufactured in England

ENOLIN Ltd.

147/149 Great Portland
Street, LONDON, W.1

Telephone: Mayfair 5673.
Telegrams: Unoenolin,
Wesdo London.



TOOTH PASTE



SHADEINE For COLOURING GREY HAIR

This popular article is largely advertised and stocked by all Wholesale Houses.
Tub Size 6d., per post 10d.; 1/4 size, per post 1/7; 2/6 size, per post 2/10; 3/9 size, per post 4/3; Ed. size, 6/- doz.; 1/4 size, 12/- doz.; 2/6 size, 24/- doz.; 3/9 size, 36/- doz.

THE SHADEINE CO., 58 WESTBOURNE GROVE, LONDON, W.

Every Chemist should stock ARCHIBALD'S OATMEAL CREAM

for chapped and rough skins, in 7½d. and 1/3 tubes; on the P.A.T.A. 5/- and 10/- dozen. The demand for this popular line is increasing rapidly. Well advertised and stocked by all wholesale houses. Write for special terms to

The ARCHIBALD CO., 190 Broadhurst Gdns., London, N.W.6.



PAPIER POUDRÉ POPPAEA ROUGE

Made in Booklet Form in White, Rose and Rachel tints.
4d., 6d., 8d., and 1/4 sizes at 2/8, 3/9, 5/- and 10/- per dozen
nett, respectively.

ONE SIZE ONLY 1/-, at 8/- per dozen.

Sole Proprietors and Manufacturers:
PAPIER POUDRÉ, Ltd., 46 Baker Street, W.1
NONE GENUINE WITHOUT ABOVE TRADE MARKS.



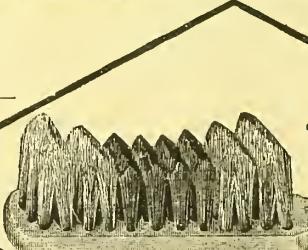
Bidwells'

YELLOW BRISTLE IN CENTRE
WHITE BRISTLE ENDS.

IN TRANSPARENT
TUBES, STERILISED
AND SEALED AT
FACTORY.

BEST QUALITY ONLY.
HARD AND MEDIUM.

Castle Mills



No 2

1924 Model

HANDLES ASSORTED—
VENTILATED—
HOLE IN HANDLE
STRONG IN CENTRE
WHERE STRENGTH
IS REQUIRED.

17/- A DOZ. MEDIUM.
19/- A D. Z. HARD.

Exminster, Devon

"Beaverpuff"

TRADE MARK

Largest Sale
of any
Powder Puff
in the World.

The Ladies' Natty Friends



Powder Puff and Rouge Pad.

With Fur or Lambswool Puffs.

Always ready for use.



Powder Puff only.

Patented throughout the World.

Mousley's Patents

PRIEST BRIDGE,
MORTLAKE,
LONDON, S.W. 14

Telephone: PUTNEY 166.

SOLE CONCESSIONAIRES FOR GREAT BRITAIN & IRELAND

ADOLPH SCOTT, LTD.

24, 25, 26 Gt. Hampton Street - BIRMINGHAM

Large Range of
Goods
suitable for
Chemist's Fancy
Department.

□ □

In SILVER,
TORTOISE SHELL,
IVORY, EBONY,
IMITATION SHELL,
XYLONITE, &c.



CASED TOILET SETS,
MANICURE SETS, &c.

□ □

Also
LOOSE HAIR BRUSHES,
MIRRORS,
POWDER JARS,
SMELLING SALTS,
SCENT BOTTLES and
SPRAYS.

TRINKET BOXES.

□ □

CUT GLASS TOILET
SETS & POWDER BOWLS

Specify when ordering :—

"ENGLISH PROPHYLACTIC"

"ADDIS in the Blue Box"

WILL NOT COLLAPSE IN HOT WATER

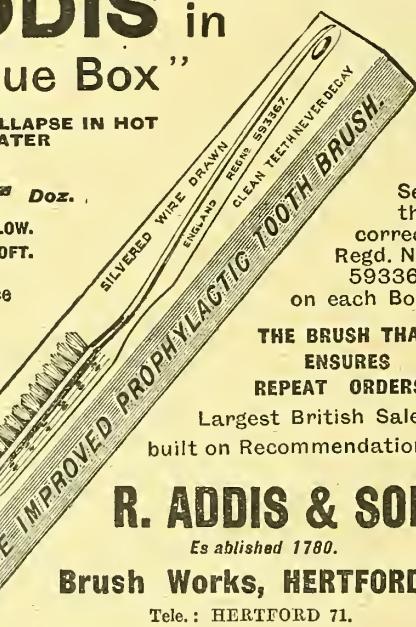
Per 20/- Doz.

VERY HARD YELLOW.
HARD. MED. SOFT.

Retail Price

2/6

each



See the
correct
Regd. No.
593367
on each Box.

THE BRUSH THAT
ENSURES
REPEAT ORDERS.

Largest British Sales
built on Recommendation.

R. ADDIS & SON

Established 1780.

Brush Works, HERTFORD.

Tele.: HERTFORD 71.

OLDEST FIRM OF TOOTH BRUSH MANUFACTURERS
IN THE WORLD.

Sold by the following Wholesale Druggists :—

LONDON.

Amor, W. W., Son & Co.

Barclay & Sons, Ltd.

Butler & Crispe

Baiss Bros. & Co.

Britton, Ma'ccilm &

Waymark, Ltd.

Bourne, Johnson & Co., Ltd.

Geo. Curling, Wyman & Co.

Dakin Bros., Ltd.

Edwards, W., & Son

Ferber, Robt., Ltd.

Galen Manufacturing

Co., Ltd. [Ltd.]

Hewlett, C. J., & Son

Healey, Royle & Co.

Hay, J. B., & Co.

Higgins, G. & Co.

May, Roberts & Co. Ltd.

Newbery, F., & Sons

Ltd.

Osborne, Garratt & Co., Ltd.

Reuter, R. J.

Rippin, J.

Sangers [Ltd.]

Schüze, F., & Co.,

Solport Bros.

Sutton, W., & Co.

Taffs, H. F., & Co.

BIRMINGHAM.
Parton, Son & Co., Ltd.
Southall Bros. & Barclay

CARDIFF.
Newbery, F., & Sons, Ltd.

GLASGOW.

Brown, Gray & Co., Ltd.

Burns, Petrie & Co.

Lorimer & Moyes, Ltd.

Munro, M'Laren & Sutherland

HULL.

Sayers Silcox, Curner & Co., Ltd.

LIVERPOOL.

Ayrton, Saunders & Co., Ltd.

MANCHESTER.

Clunie & Co.
Chemists' Sundries, Ltd.

Harper, C. W.

Harrison, Chas., & Sons

Heath Bros.

Millner, R. M.

Place & Co.

Quilliam, J., & Co.

Woolley, Sons & Co.

Ltd.

NEWCASTLE.

Hall Forster & Co. Ltd.

G. B. KENT & SONS, LTD.

Are known the World over as
the Largest Manufacturers of

**BEST
BRITISH
BRUSHES**

Please write for full Particulars to—

75 Farringdon Road, E.C.1.

GILLETTE BLADES

1 Box, containing 10 doz. genuine U.S.A. Gillette Blades at 28/- per box.

3 Boxes " 30 " " " " 27/4 "

5 Boxes " 50 " " " " 26/2 "

Single Mirrors for Handbags at 7/3 per gross; Hair Wavers at 8/- per gross; Hair Brushes, real Bristle, at 7/- per dozen; Cloth Brushes at 6/3 per dozen; Shaving Soap, in tins, 4/3 per dozen; Black Unbreakable Combs, 7½ in., at 4/9 per dozen; Flash Lamps, 14/- and 16/- per dozen, complete; Penknives at 7/- per dozen.

Price List in hands of Printers. Cash with order, Post Paid.

I absolutely guarantee to refund money in full, if goods are not as advertised.

L. FRANKS, GENERAL MERCHANT,

Cromwell House, High Holborn, London, W.C.1

VERY NEW AND VERY CHARMING.

POUDRE COMPACTE—THÉ DANSANT

(Regd.)

In two Nos. F.100 Complete with Puff 7/6 doz.
styles F.101 " " " " and diminishing Mirror 10/6

"The Dansant" Powder, which is of the very highest grade, is in assorted shades, and is compressed by our entirely new process which gives greatly increased strength and freedom from breakage, while yielding the finest adherent powder in use. Both these lines are wonderful value and will give satisfaction to seller and consumer.

Manufactured only by
SOLPORT BROTHERS, Ltd.
184/190 Goswell Road, London, E.C.1.
and obtainable through all Wholesale Houses.

Illustration of No. F.101.

Telegraphic Address : "CRESSWELL, HOLB., LONDON."

Telephone : No. 1432 Holborn.

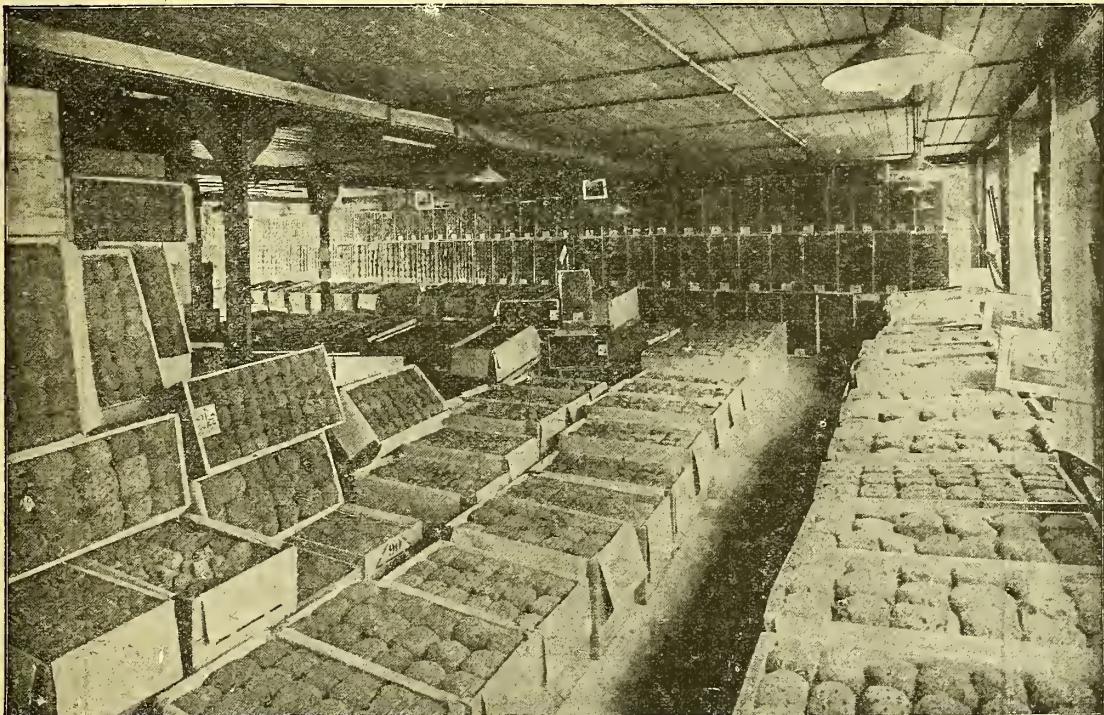
THE SPONGE HOUSE

INTERNATIONAL SPONGE IMPORTERS, LIMITED,

CRESSWELL BROTHERS BRANCH

Sponge Importers, Exporters and Merchants, and Chamois Leather Dressers,
18 and 19 RED LION SQUARE - - - **LONDON, W.C.1**
 WITH THE LARGEST STOCKS OF ALL SPONGES IMPORTED DIRECT BY US FROM THE FISHERIES
 AT LOWEST PRICES.

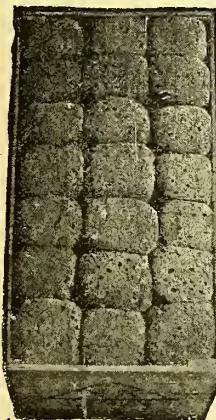
WE INVITE COMPETITION.



Buyers are invited to Call to Inspect our Magnificent Stocks and make their own selections. Lowest Market Prices.
 Absolutely Best Values. The following abridged List will serve as a guide to Buyers when writing.

UNBLEACHED MEDITERRANEAN SPONGES in Original Cases.

THE CONTENTS OF THE FOLLOWING CASES WILL BE PRESS-PACKED AND SENT POST FREE
 TO COLONIAL AND FOREIGN BUYERS WITHIN THE RADIUS OF PARCELS POST.



HONEYCOMB.

Extra Choice.
 Finest Texture and Shape.
 The Pick of all the Fisheries.

Pieces in Case.	Average Price per Piece.
300 Toilet at	9d.
250 "	1/-
200 "	1/6
160 "	2/-
140 "	2/6
120 "	3/-
100 "	3/6
90 Medium Bath	4/6
80 "	5/6
72 "	6/6
60 "	7/6
45 Large "	8/6
30 "	10/6

HONEYCOMB.

Toilet & Bath.
 Good 2nd Quality

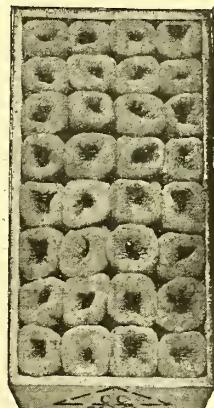
Pieces in Case.	Average Price per Piece.
270 at	6d.
180 "	9d.
170 "	1/-
160 "	1/6
140 "	2/-
120 "	2/6
110 "	3/-
90 "	3/6
80 "	4/-
75 "	4/6
70 "	5/-
65 "	5/6
60 "	6/6

FINE TURKEY

SOLIDS.

SELECTED SHAPES.
 1st Quality

Average Pieces per Case, Piece.	Price
Nursery	200 at 1/-
Toilet	150 " 1/6
"	100 " 1/9
Bath	50 " 3/-
"	36 " 4/-
"	24 " 5/-



LOOSE GOODS DEPARTMENT. SPONGES IN SMALL PACKAGES. Fine Turkey, Fine Egyptian and Honeycomb. In 1st, 2nd and 3rd Qualities Bleached or unbleached (state which in ordering). On strings of 1 dozen pieces, or loose in bags. At per doz. : 2s., 3s., 4s., 6s., 9s., 12s., 15s., 18s., 24s., 30s., 36s., 42s., 48s., 54s., 60s., 66s., 72s. Bleached Cuban. At per Strins or Dozen. Wool, Grass, Yellow and Fine 1s., 2s., 3s., 4s., 6s., 9s., 12s., 15s., 18s., 24s.

Ashes of Roses

(BOURJOIS-PARIS)

The most exquisite and dainty ever known.

MORE POPULAR THAN EVER.
Link up with our advertising by prominently displaying

Ashes of Roses

The exquisite and dainty production of the
house of

BOURJOIS

PRICE LIST.

No.					Per doz.	P.A.T.A.
4.	<i>Ashes of Roses</i>	Perfume	-	-	60/-	7/6
5.	"	Perfume	-	-	84/-	10/6
3.	"	Face Powder in 7 tints	-	-	24/-	3/-
2.	"	Compact Powder and Puff in 5 tints	-	-	15/-	1/9
41.	"	Miniature Perfumes	-	-	8/-	1/-
42.	"	Introductory Sets (containing Powder and Perfume)	-	-	13/-	1/6
8.	"	Talcum Powder	-	-	20/-	2/6
447.	"	Vanishing Cream	-	-	20/-	2/6
4004.	"	Bath Crystals	-	-	20/-	2/6
4001.	"	do.	-	-	36/-	4/6
4000.	"	Bath Dusting Powder	-	-	44/-	5/6
282.	"	Eau de Cologne	-	-	140/-	17/6
283.	"	do.	-	-	72/-	9/-
64.	"	Lip Sticks	-	-	12/-	1/6
450.	"	Cold Cream	-	-	30/-	4/-

A. BOURJOIS ET CIE, LTD.,
66 Carter Lane, LONDON, E.C.4.

PARIS

 NEW YORK SYDNEY NEW ZEALAND

Ashes of Roses

WARNING

We respectfully request the urgent attention of our retail and wholesale friends throughout the Country to the Order made on the 20th December, 1923, and in accordance with this Injunction we will at all times take whatever proceedings may be necessary to preserve our rights.

1923 W. 4398.

In the High Court of Justice. CHANCERY DIVISION.

MR. SYNGE.
Registrar.

MR. JUSTICE ROMER.

Fo. 205.

THURSDAY the 20th day of DECEMBER 1923.

Between PAUL LEHMANN WERTHEIMER and PIERRE JULES
WERTHEIMER trading as A. BOURJOIS ET CIE Ltd. Plaintiffs,
AND
J. MURPHY and WINSTONE & CO. - - - Defendants.

UPON MOTION this day made unto this Court by Counsel for the Plaintiffs and UPON HEARING Counsel for the Defendants and UPON READING the Writ issued on the 11th December 1923 and the Plaintiffs and Defendants Joseph Murphy and Lewis Weinberg (trading as Winstone & Co.) by their Counsel consenting to the hearing of the said Motion being treated as the Trial of this action and consenting to this Order.

THIS COURT DOTH ORDER that the Defendants and each of them and their respective servants and agents be perpetually restrained from selling offering or exposing for sale or procuring to be sold any perfume or other perfumery goods not of the Plaintiffs' manufacture under the name *Ashes of Roses* And from passing off or attempting to pass off or enabling or assisting others to pass off any perfume or other perfumery goods not of the Plaintiffs' manufacture as or for perfume or perfumery goods of the Plaintiffs' manufacture by the use of the said name *Ashes of Roses* or otherwise howsoever.

AND IT IS ORDERED that the Defendants do and each of them do on or before the 27th December 1923 make and file an affidavit or affidavits and deliver a copy or copies thereof to the Plaintiffs' Solicitors stating the numbers of labels and documents which were on the 14th December 1923 in their or his possession or power or under their or his control which contain the words *Ashes of Roses* applied to goods not being the Plaintiffs' goods and do at the same time deliver to the Plaintiffs' Solicitors the said labels and documents.

AND IT IS ORDERED that the Defendants pay to the Plaintiffs the sum of Ten pounds as agreed damages and also their costs of this action such costs to be taxed by the Taxing Master in case the parties differ.

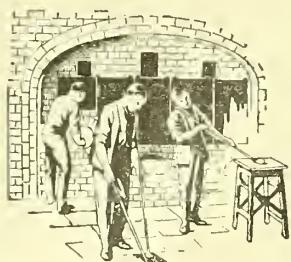
A. BOURJOIS ET CIE, Ltd., 66 Carter Lane, LONDON, E.C.4

PARIS

NEW YORK

AUCKLAND

SYDNEY



GLASS BOTTLES

FULL RANGE OF

Medicals (plain and graduated),
Flat Dispensing, Panel Flats,
Poisons, Limes, Kalis, Emulsions,
Tobins, Vials, Tablets, &c. &c.

MANUFACTURED BY—

MONEY'S PATENTS, LTD.

111 Dalston Lane, LONDON, E. 8.

Phone : Dalston 1456.

ALWAYS at the TOP
OF THE POLL.

M.P.'S

**BRITISH
LOWN
OTTLES**

White, Blue, Green,
and Amber.

TIN CANISTERS

PLAIN, GOLD LACQUERED AND STOCK DESIGNS.
OINTMENT TINS, HEALTH SALTS, &c. FROM STOCK.

HORNBY & Co., DEPT. "T", 36, High St., Hull

Alcohol for Industrial Purposes Duty-Free Spirit.

The Industrial Spirit Supply Company, Limited.

Agents : HONEYWILL BROS., Ltd., 79 MARK LANE, LONDON, E.C.3.

Glass Bottles

Speciality :

MEDICAL DISPENSING
BOTTLES OF ALL KINDS

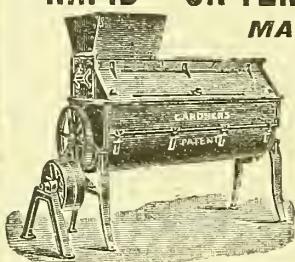
Wholesale & Export

W. SMITH, Senior

169-170 Railway Arches, Braintree St.
Cambridge Road, Mile End, E.2.
Telephone No. East 5578. Estd. 1880



GARDNER'S PATENT "RAPID" SIFTERS & MIXERS MANY THOUSANDS



working in almost every
Trade where POWDERS
are Sifted and Mixed and
Lumps Reduced, all being
done at one operation
and without loss by dust.

FOR HAND OR POWER.

CATALOGUES FREE.

WM. GARDNER & SONS (GLOUCESTER) Ltd.
Engineers, GLOUCESTER.

THE METHYLATING CO., LTD.

for METHYLATED SPIRIT.

KINNAIRD HOUSE, Pall Mall East, LONDON, S.W. 1.

Telephone : Regent 5621.

Telegraphic Address : "Methcolim, Phone, London."

SUTTON'S

CLOUDY AMMONIA

To-day, as ever, the extra strength of
SUTTON'S
CLOUDY AMMONIA

makes it the most efficient and the most economical for all purposes.

The enviable reputation of G.F. Sutton, Sons and Co. ensures that in handing out a "Sutton" product the retailer is giving his customer the very finest quality. Doesn't that mean "repeat" orders every time for YOU?

Sole Manufacturers:
G. F. SUTTON, SONS & CO.,
Osborne Works, Brandon Rd.,
King's Cross, LONDON, N.7

"A good name is more than riches"

LIQUID

PARAFFIN

Sterns B.P.
is guaranteed to be the finest quality of Liquid Paraffin produced. It has the patronage of the largest wholesalers, the recommendation of the Medical profession, and is used in the principal Hospitals in preference to all other kinds.

STERNS LTD.,
80 Royal London House,
Finsbury Square,
E.C. 2.

Genuine Turpentine

TURPENTINE SUBSTITUTES

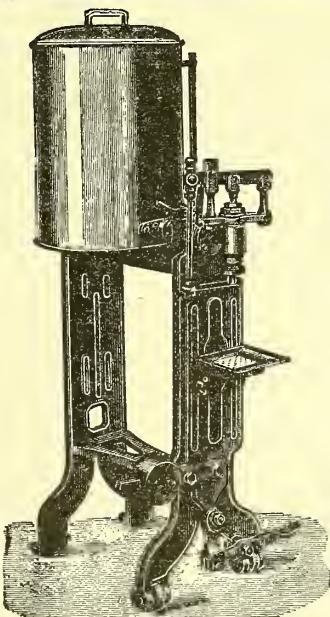
Enquiries solicited
for all Grades of Oil

Langley-Smith & Co.

14/20 St. Mary Axe,
London, E.C. 3.

Telegrams: "Tallowdom London." Tel. No.: Avenue 3820.

(6)



**JACKSON'S
"EXPRESS"
Bottle Filling
Machine - -**

THE FASTEST,
CLEANEST & SIMPLEST.

Average Speed
1,000 P. tles per hour.

Specially good for—
Emulsions, Hair Oil,
Hair Restorer, Dyes,
Lacquers, Essences,
Extracts, Castor Oil,
Camphorated Oil,
Glycerine,
Toilet Preparations,
Veterinary Medicines
and Patent Medicines
of all kinds.

Used by many of the
largest Wholesale Chemists
and Druggists, who
write:—"There is no better filling machine," "An excellent
machine," "A great help—Average speed, 1,000 bottles per hour."

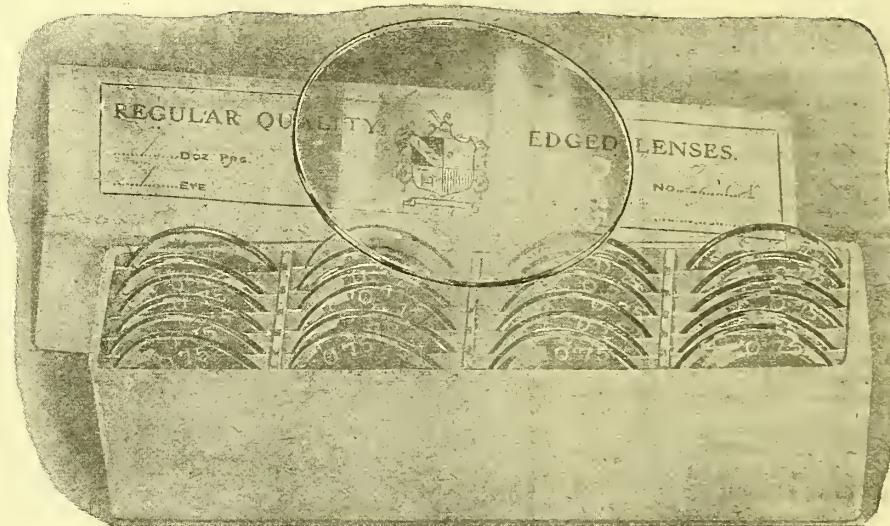
PRICE, with our latest improvements
and nickel-plated fittings, - £20

Also Filters, Asbestos, Pumps, Corking & Capsuling Machines, &c.

JOHN P. JACKSON & CO. Ltd. ENGINEERS and
COPPERSMITHS,
2, 3 & 4 Pownall Square, LIVERPOOL.



INTERCHANGEABLE LENSES



Being manufactured automatically throughout, our Interchangeable Lenses can be relied upon never to vary in quality, size or shape.

Quotations for various grades upon application.

RAPHAEL'S LTD., Hatton Garden, LONDON, E.C.1.

MANY SUCCESSES IN THE EXAMINATIONS!

Your Opportunity to

QUALIFY IN OPTICS

PRACTICAL WORK. Students taking the Course may receive personal tuition in the practical work AT ANY TIME DURING THE COURSE.

Expert Tuition for the SIGHT-TESTING DIPLOMAS of the Worshipful Company of Spectacle Makers (F.S.M.C.); the British Optical Association (F.B.O.A.), or the National Association of Opticians (F.N.A.O.).

Write for full particulars—

C. A. SCURR, M.P.S., F.S.M.C., B.Sc., F.I.O., F.N.A.O., etc.
50 High Street, BARNET
(N.Z. Representative : C. AITCHISON, PALMERSTON Nth.)

WESTMINSTER COLLEGE OF PHARMACY.

WILLS' UNIVERSAL POSTAL SYSTEM

FEES (BRITISH ISLES):

Part 1 or 2 - - - £1 1 0
Parts 1 and 2 - - - £1 11 6

For Qualifying, Preliminary & Apothecaries' Hall Examination Individual subjects may be taken.

Full particulars from The Principals,
190 CLAPHAM ROAD, S.W.9.

Liverpool School of Pharmacy

2 BLACKBURN PLACE, LIVERPOOL.

Principal—

H. HUMPHREYS-JONES, A.I.C., F.C.S., Ph.C.
Assisted by J. BUTLER, B.Sc., M.P.S.

Preparation for the Qualifying Examination of the Pharmaceutical Society.

School reopened after the Xmas vacation on Jan. 8th.

For full particulars apply to the Principal.

LONDON COLLEGE OF PHARMACY

Principals—HENRY WOOTTON, B.Sc. C. W. GOSLING, Ph.C.

Jan. 8th.—Three Months' Revision Course (Minor)

Books published at London College :

Essentials of Pharmacy	...	...	5/-	post free
Analytical Tables	...	...	2 6	" "
Volumetric Analysis	...	...	2 1/2	" "
Map of Habitats	...	...	2/6	" "

London College Passes—Pharmaceutical Examinations:

Year ending July, 1921—Part I. 73—Part II. 142.

Year ending July, 1922—Part I. 82—Part II. 115.

Apply—

THE SECRETARY, 361 CLAPHAM ROAD, LONDON, S.W.9

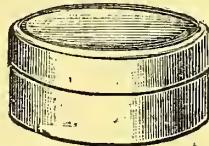
ALUMINIUM OINTMENT BOXES

REDUCTION IN PRICES

Fill the gap between the chip box and the porcelain pot. Try an assorted dozen. You will find them just what you want.

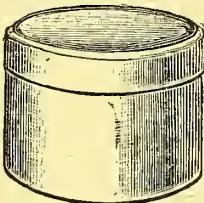
**PRICES (either shape,
tall or flat):**

Per gross :	$\frac{1}{4}$ oz.	9/-
"	$\frac{1}{2}$ oz.	12/-
"	1 oz.	16/6
"	2 oz.	27/-



$\frac{1}{2}$ oz.

(The 2 oz. tall shape is similar to the 1 oz. size but twice the height).



1 oz. TALL.



FLAT SHAPE NESTED.
 $\frac{1}{4}$ oz. $\frac{1}{2}$ oz. 1 oz. 2 oz.

Chemists everywhere are taking up the use of these for their preparations. Their light weight as compared with porcelain pots makes for much saving in regard to carriage, the nested ones being specially suited for export.

For large contracts special rates will be quoted.

CARRIAGE PAID ON ORDERS OF £3 AND UPWARDS.

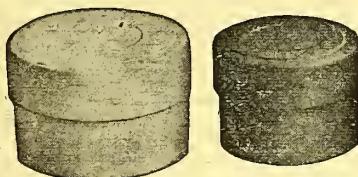
A discount of 5% for prompt cash is allowed on all amounts of 10/- and upwards. Money returned if goods are not satisfactory. Write for New Price Lists of Druggists' Sundries, Toilet Requisites, Rubber Goods, Cut Sheet Rubber Appliances, etc.

BURGE, WARREN & RIDGLEY, LTD.

91 & 92 GREAT SAFFRON HILL,
LONDON, E.C.1.

"Corruganza" SEAMLESS OINTMENT BOXES and PILL BOXES

have replaced the old "Willow" boxes—
Greaseproof—the bottoms cannot fall out.



**HUGH STEVENSON & SONS
LIMITED,**

Summerstown Works, LONDON, S.W.17

And at Manchester, Birmingham, Leith, Perth and Glasgow.

Kindly mention this Journal when making enquiries.

ACELTA
Caps your Bottles

IT OFFERS
THE BEST SOLUTION
TO YOUR
CAPPING PROBLEM

Write for a copy of our pamphlet.

"ACELTA" CAPPING CO., LTD.
185 PRINCESS ST., MANCHESTER.

DOG MEDICINES

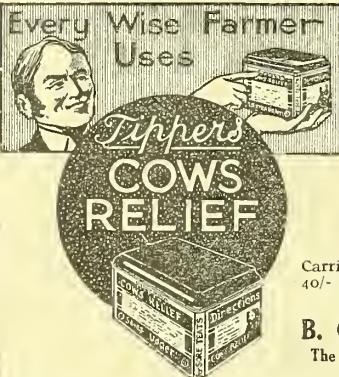
Nine-tenths of your customers doubtless keep a dog and frequently want to doctor him.

THESE COMMAND A READY SALE.

DOG PILLS (In Boxes for Retail) **APERIENT, ALTERATIVE, COUGH, DISTEMPER - WORM - ETC.**

Two sizes, **3/6** and **6/6** dozen. Own name on one gross.

HOWARD LLOYD & CO., LTD., LEICESTER



RETAIL PRICES.

2/9, 6/-, 14/-, and 21/- per tin.

Invoiced to the Trade at

2/6, 5/6, 13/6, and 20/- respectively, and subject to 20% discount.

Carriage paid on orders of 40/- net. Postage charged on small lots.

B. C. TIPPER & SON,
The Veterinary Chemical Works.
BIRMINGHAM

BATTLE'S VERMIN KILLER

The Oncoming Months will see

a renewed onslaught on Vermin, the gravity of the scourge being now universally recognised.

In anticipation of a largely increased demand for a reliable destructive agent, the public is being constantly reminded of **BATTLE'S VERMIN KILLER** by prominent advertisements in the daily press.

**ARE YOUR STOCKS
ADEQUATE?**

Prepared only by BATTLE, SON & MALTBY, Manufacturing Chemists, LINCOLN.

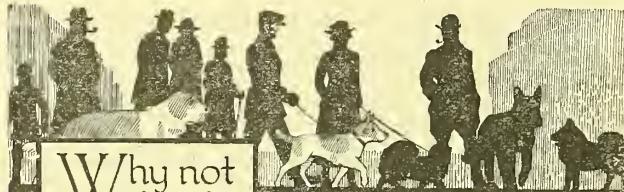
It will pay you to sell Battle's Vermin Killer

because—the small attention required by taking your customer's signature offers a personal service which will be appreciated—and incidentally yield a good profit.

1*l* packets at 5d., 9d. & 1/3 ea. (P.A.T.A.)

Of all Patent Medicine Houses at 3/- 5/- & 9/- per dozen.

**WANTED—Chemists to sell
'Ready Rat Relief' & 'Outem'
FOR RAT DESTRUCTION
"Solventen" for Cockroach destruction
Good Profits. Quick Returns.
B. L. & N. Phillips, Ltd., 124 Southwark St., London, S.E.1**



Why not obtain at once List of Remedies Offers and Free Sales Helps from Spratt's Patent Ltd., 24/5, Fenchurch St., London, E.C.3.

One man in four owns a Dog

One man in four is a prospective customer if you stock Spratt's Dog Remedies.

Do not let good business pass you by!

The dog requires appropriate medicines just as you do, or any of your customers—see that he gets it through you.

**SHERLEY'S
DOG MEDICINES
INSECT POWDER
SHAMPOO, and
LACTOL**
(P.A.T.A.)



These preparations command a ready sale, and are by far the largest advertised of any on the market. They are protected at prices that leave an excellent margin of profit for the retailer, and the terms on which they are supplied preclude any possibility of loss. We have an excellent range of literature and show cards, and do all in our power to assist chemists by referring mail customers to them.

Write for Price List and Terms.

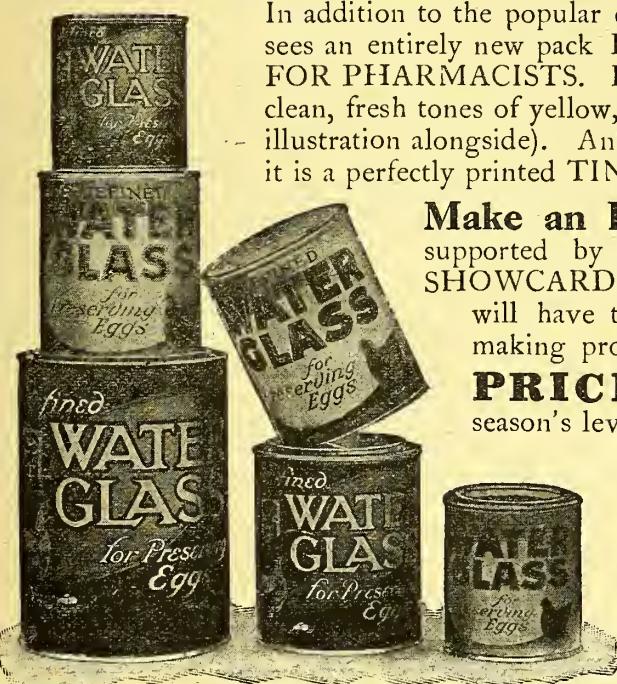
A. F. SHERLEY & CO., LTD.
18 MARSHALSEA ROAD, LONDON, S.E.1
Tel. No.: Hop 1897. Telegrams: "Sherleydom, London."

SPRATT'S DOG REMEDIES AND SOAPS

GOODALL'S the WATERGLASS Pack for CHEMISTS.

THE FINEST PACKS.—KEENLY PRICED.

WHETHER it's perfumery or Waterglass, you know how greatly the speed and ease of sales depend on the good looks of the pack—and that is where GOODALL'S WATERGLASS scores. Our Waterglass looks what it is—a pack for the high-class, critical, pharmaceutical trade. And yet, such is our Waterglass turnover, our pack costs you no more than the cheap-looking kinds.



In addition to the popular designs of last year, this season sees an entirely new pack RESERVED EXCLUSIVELY FOR PHARMACISTS. It is a rich, sell-at-sight design in clean, fresh tones of yellow, red and white (upper design in illustration alongside). And of course, like all our packs, it is a perfectly printed TIN—not a leaky container.

Make an Early Season's display— supported by the strong, expensive, selling SHOWCARDS we supply FREE, and you will have to re-order two or three times, making profits all the time.

PRICES are now fixed at the lowest season's level, and will be gladly sent you, along with colour photograph, on receipt of a card stating your expected season's needs. Or, to save time, perhaps you will kindly look up the coloured illustration of our packs in our Inset in the 1924 "C. & D." Diary.

At any rate, for
your own protection,

Let us send you our PRICES.

1924 GOODALL'S
is going to be **WATERGLASS** year.

GOODALL, BACKHOUSE & CO. : LEEDS.

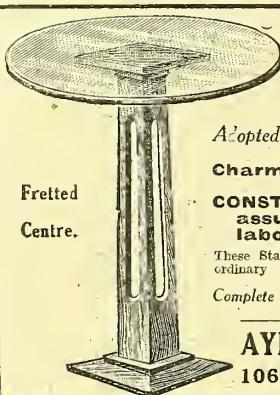
WRITE TO

BATTLE'S

FOR

Standard**DISINFECTANTS** for all purposes.Carbolic, Pine and High-Coefficient Fluids.
Superior Grade LYSOL in attractive cartons.**DOG SOAP, POULTRY & PIG POWDERS, etc.**

High-class attractive decorated tins and cartons. "Agent's own name."

BATTLE, HAYWARD & BOWER (formerly **BATTLE, MALTBY & BOWER**), Victoria Chemical Works, Lincoln**OAK PEDESTALS**AND
Plate Glass Shelves*Adopted by Leading Window Dressers**Charming and Artistic Effects**CONSTANT CHANGE OF SHOW
assured. Window-dressing
labour more than halved.*

These Stands can be used in conjunction with ordinary rows of Window Shelves if desired.

Complete Sets 27/6, 50/-, 81/6, 96/6 & 97/6

AYRTON-GRAHAM, Ltd.
106 Duke St., LIVERPOOL.IF YOU ARE REQUIRING GENUINE
U.S.A. GILLETTE BLADESSTAMBOIS, 34 Call Lane, LEEDS.
CAN SUPPLY YOU, AND AT ONLY
30/- per box, post paid,
cash with order.NO NEED TO
HAVE CANADIANDO YOU KNOW THE LATEST?
For each gross of EVER-READY Blades at 32/- per gross
we will send you FREE 24 EVER-READY RAZORS.
This offer is for a limited period. Order early.GILLETTE, VALET, 7 O'CLOCK, DURHAM DUPLEX,
EVER-READY, CLEMAK, RAPID, Etc. BLADES.
RAZORS, STROPS, Etc.

"Monkey" and Tank Stoppers in Stock.

Send for Price List. Write for Special Offers.
YORKSHIRE CHEMISTS are requested to enquire regarding our
"RAPID" ADVERTISING SCHEME.You cannot do better than try, and then stick to
L. J. STAMBOIS, 34 CALL LANE, LEEDS.
For all Razors and Blades.**IDOF**THIS FLUID WILL DESTROY
ALL INSECTS such as FLIES,
MOSQUITOES, WASPS, BEETLES,
ANTS, COCKROACHES,
CRICKETS, etc., etc.**INSECT DESTROYING FLUID
AND INSECT BITE REMEDY**

The Bites Remedy will stop immediately all irritation, itching and swelling after insect bite.

Sold in Glass-stoppered Tubes in Boxwood Cases. For details, circulars, booklets and showcards apply to—
HERTZ & CO., 9 Mincing Lane, London, E.C.**IDOF****The Chemist's
Compact Library**MONEY-MAKING AND
MONEY-SAVING BOOKS**EVERY BOOK BY
AN EXPERT.**May be obtained at the published prices from any
Wholesale Drug or Sundries House, or from**THE CHEMIST & DRUGGIST**
42 CANNON STREET, LONDON, E.C.4

Branch Offices:

Manchester and Sheffield, England;
Melbourne and Sydney, Australia.

Do not fail to investigate the
NEW and IMPROVED
VISKAP
SELF - FIXING
BOTTLE CAPS

Details from
**THE VISCOSÉ
DEVELOPMENT Co., Ltd.**
BROMLEY, KENT.
PROMPT DELIVERY.

HARVEY'S

Watts' Embrocation, or Curb Bottle.
Aconite Powders.
Worm & Condition Powders.
Watts' Red Lotion.
Hair-Restoring Ointment.
Edos, or Tasteless Purging Powder.

HARVEY'S

Great Remedies for the Horse

*Protected Prices
(P.A.T.A.)*

HARVEY'S

Koppes Powder.
Parasiticide.
Thrush Specific.
Hoof Ointment.
Hair Restorer (Human)

Of all the leading Druggists' Sundries Houses.
HARVEY & COMPANY, Ltd., Dublin.



STEADY SALE

ALL THE YEAR ROUND

Messrs. Stearn Bros., Chemists, Stowmarket, write: "December 18th, 1923. Your 'Rodine' has a steady sale with us all the year round."

Messrs. Taylor, Brown & Flood, Ltd., Chemists, Bedford, write: "December 22nd, 1923. The 'Rodine' Window Display was effective and gave your product a good impetus here. Your 'Rodine' is now selling quite well, and the margin you allow invites us to give it preference."

"RODINE" MARGIN and "RODINE" PREFERENCE

Besides excellent profit "Rodine" ensures satisfied customers. This is a valuable asset in selling this profitable side-line. Get busy now and make sure of securing a good sale all the year round.

Attractive advertising matter sent free on request to the Sole Maker

HARLEY, Manufacturing Chemist, **PERTH, Scotland**

Collapsible Tubes



You can be sure of getting

**The Best Service and Delivery,
The Highest Quality & Finish
The Lowest Current Prices**

FROM

Beets & Col^{ld}.
2, Wharf Rd, City Rd.
London N.1.

Established 1857.

CORRUGATED PAPER BOXES AND PACKINGS FOR ALL PURPOSES.

*Corrugated Paper in Rolls, Boxes, Pieces, Partitions, Cartons, Bottle Wrappers. Tinted.
Waterproof Papers, Gummed Papers, Tapes, &c. Toilet Rolls.*

Enquiries CORRUGATED PACKING MATERIALS CO., Ltd.
Solicited. AMBROSE STREET MILL, WEST GORTON, MANCHESTER. Phone : Openshaw 401.
Grams : "Corrapaper, Manchester."

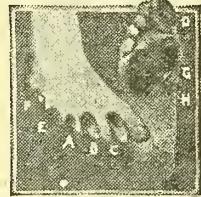
*What would happen to YOUR business if you were temporarily disabled by
ACCIDENT OR SICKNESS?*

Your financial loss is bound to be great. Therefore, safeguard yourself and your business by taking out a

PERSONAL ACCIDENT & SICKNESS POLICY

Issued by

THE LICENSES & GENERAL INSURANCE CO., LTD.
24, 26 & 28 MOORGATE, LONDON, E.C.2.



DR. SCHOLL'S ABSORBO PADS.
A shape and size for every corn, callous and tender place. Made of finest surgical rubber, prevents chafing and corrects by absorption. A., B., and C. 6d.; D. and E. 9d.; F., G. & H. 1/-

THE SCHOLL MFG. CO., LTD., 1-4 GILTSPUR STREET, E.C.1.



enables you to relieve and correct every type of foot trouble. Scholl's tremendous National Advertising ensures a ready sale for Dr. Scholl's Appliances and Specialities, which are anatomically correct and universally approved by the medical profession. Write for full particulars.

"OWTAZIN"
Regd.
OUT - / - IN



VACUUM FLASKS

GUARANTEED DOUBLE TESTED.

Delivery from Stock. Free Cases. Carriage Paid. Samples and Prices sent per return of post.

OWTAZIN CO. J. TOLMIE, M.P.S.
Proprietor.
50-51 FORE STREET, LONDON, E.C.2.
Phone : London Wall 5482.

A line the Stockist may strongly recommend, knowing that he is meeting the case with articles of unvarying reliability :—

"SURCO" SEAMLESS SURGICAL HOSIERY

comprising ELASTIC STOCKINGS, BELTS, SUSPENDERS, TRUSSES, etc.

Write for Price Lists and Measurement Forms to the Patentees and Manufacturers :

THE SURGICAL HOSIERY CO. LTD., Dept. B, Russell Street, NOTTINGHAM.



W.M. WARNE & CO. LTD.

29 GRESHAM STREET, E.C.2.

India Rubber Manufacturers,

Surgical, Chemical, Domestic Articles, Syringes,
Water Beds, etc.



PRECIPITATED CHALK

**LIGHTEST, Dense & all grades
TO SUIT ALL PURPOSES**

CHEMICALS : Fine and Heavy.

'Phone: Central 4613.

Tel. Add.: "Levermore, Phone, London."

A. LEVERMORE & CO., LTD. ABC Codes
8-10 GT. ST. HELENS, LONDON, E.C.3 5th & 6th Editions

FREDK. FINK & CO.,

10 & 11 MINCING LANE, LONDON, E.C.3.

SPECIALITIES.—Gums Arabic and Tragacanth as imported or finely powdered.

EUCALYPTUS OIL

75/80% of Eucalyptol

Factories in Spain

F. C. GONZALEZ 68 Rue de Pascale,
BRUXELLES (Belgium)

CELLULOID CAPS for EARTHENWARE, FLINT-GLASS AND OPAL POTS. Every size made. Any colour. Printed Caps a Speciality.

Delivery 48 hours. Also Manufacturers of TEETHING RINGS, MIRRORS, SOAP CASES, POWDER BOXES, TOOTH BRUSH HANDLES and any articles to order. Advertising Novelties a Speciality.

Send your enquiries:
CASCELLOID, LTD. - BRITANNIA WORKS - LEICESTER.

Rubber Corks

ALL SIZES & FOR ALL PURPOSES
ONE HOLE, TWO HOLE OR SOLID

THE ALTRINCHAM RUBBER COMPANY

MOSSBURN BUILDINGS, ALTRINCHAM

GILLETTE BLADES

U.S.A., 30/- per box. Canadian, 28/- per box.
OLD TYPE AND NEW IMPROVED GILLETTE RAZORS.
SPECIAL! With every gross of Ever-Ready Blades at 31/6 gross, we give 24 Ever-Ready Razors FREE.
CLEMAK, 7 O'CLOCK, DURHAM DUPLEX BLADES, 1/8 pkt.
Send for Price List of Powders, Scars, Shaving Brushes in Stock.
Keenest Prices. [Tel.: 4760 Hoborn.]

A. FRANKS, 23 BARTLETT'S BUILDINGS, LONDON, E.C.4

"DEPENDABLE TOBACCO WHOLESALEERS."

MIXED PARCELS A SPECIALITY.

Established Fifty Years.

Price Lists mailed on request.
A PROFITABLE SIDE LINE
FOR CHEMISTS.

SINGLETON & COLE, LTD., CANNON ST., BIRMINGHAM.

TINS BOXES & CANISTERS

(made in our own works)
at keenly competitive prices.

Let us quote for any kind or size you
need. Or ask for list of STOCK TINS

GOODALL, BACKHOUSE & CO., Leeds.

DOOMO AIRSHIP FLY BAND



Write for quotations
A wide, long band,
sticky on both sides.

SMITH & CO., Doomo Works, NEWARK

UMCKALOABO THE REMEDY FOR TUBERCULOSIS.

Recently the subject of comments in the Press.

PRICES ON APPLICATION TO
CHAS. H. STEVENS, 204 & 206, Worple Road,
Telephone: Wimbledon 785. WIMBLEDON, S.W.20.

MANCHESTER SCHOOL OF PHARMACY

Founded 1882

292 OXFORD ROAD, MANCHESTER.

Principal: H. BRINDLE, B.Sc.Hons.(Lond.), A.I.C., Ph.C., F.C.S.
Prospectus sent post free on application.

FILING COVERS

For The Chemist and Druggist Retail Price List.
In Stout Cardboard with cords. Price 1/-each post free

The Chemist & Druggist, 42 Cannon St., London E.C.4

PYTHON POINTS TEA

THOS. CHRISTY & CO., 4-12 Old Swan Lane, E.C.4

If increasing your business every day
is of paramount importance to you, and
we reckon it is,—then investigate our
P.P.T. plan at once—lose no time—get
sample and "Every Day More Business"
Circular. NO ADVERTISING THAT
A CHEMIST CAN DO BRINGS IN
SO GOOD OR BETTER RETURNS
at so trifling an outlay.

4

PURE ORANGE WINE

A. MILLAR & CO., LTD., DUBLIN

VINUM AURANTII B.P.

Prepared in strict accordance with the Formula of the British Pharmacopoeia.

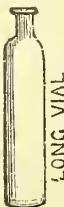
Samples from Head Office, Thomas Street, DUBLIN, or London Office, 74 Great Tower Street, LONDON, E.C.3.

(Wholesale only)

GLASSWARE OF EVERY VARIETY

ALWAYS IN STOCK.

LOW COMPETITIVE PRICES.



THIS WEEK'S SPECIAL OFFER VIALS

Our Special Clearance Offer this week of a small quantity of $\frac{1}{2}$ dram and 1 dram Vials at a low price cannot be repeated.

SEND YOUR REQUIREMENTS TO-DAY.

**NEARLY 15,000 CASES
OF GLASSWARE IN EVERY VARIETY IN STOCK.**

An illustrated list will gladly be sent on request to

JULES LANG & SON
(Opposite Agricultural Hall).
Telephone—Orbit 2770-2 (3 lines)
The Glass Specialists
CHARLTON PLACE
ISLINGTON LONDON N.I.

Telegrams—
 "Assorted," "Phone London."
 Codes—ABC 5th Edition,
 Scott's 10th Edition, 1908
 and Bentley's Complete
 Phrase Code.

GLASS BOTTLES

Medical Flats, Panels,
 Vials, Limes, Poisons,
 Honey Jars, Screw
 Pomades, etc., etc.

TOM LAYCOCK & CO.
 Cabinet Chambers,
 Basinghall Street, LEEDS.

For _____
 Accurate
 Capacity
 Medical
 Bottles

and with
 CORRECT GRADUATIONS,
 in
 WHITE FLINT GLASS,

Be Sure and Write
 The
**RYLANDS GLASS and
 ENGINEERING Co. LTD.**
 BARNESLEY, —— YORKS.

Don't use COMMON BOTTLES

There is nobody so fastidious as an Invalid. Cater to his fastidiousness by turning out your prescriptions in the best possible style.

There is no better help than a smoothly finished, bright, attractive bottle.

Buy BEATSON'S BOTTLES

ESTABLISHED 1751.

Beatson, Clark & Co., Ltd.
ROOTHERHAM GLASS WORKS,
ROOTHERHAM.

BOTTLES
and Glassware
of Every Description
for The Trade
WHOLESALE ONLY

In all colours

MEDICAL FLATS
PANELS
VIALS
POISONS
LYSOLS
LIMES
KALIS
MEXICANS
PERFUMES
FEEDING BOTTLES
&c. &c.

LAX & SHAW
LIMITED.
Albert Glass Works,
Hunslet, Leeds.

BELINDA GLASS WKS. HUNSLET. CLARENCE GLASS WKS. HUNSLET.
TELEGRAMS FEEDERS, LEEDS. TELEPHONES 21047, 23080



Two Aids to Bigger Musterole Sales

Here are two proved Musterole sellers—the large card for your window, the smaller for your counter.

Displayed prominently, these two cards will work their will upon your customers and customers-to-be

Selling by virtue of their attractive appearance ; their bold featuring of ailments pleasantly relieved by Musterole ; their effective tie-up with Musterole advertising.

Once seen, they are rarely forgotten—to your most profitable advantage.

Both cards are free to chemists. If you have not received them yet, write us to-day.



THOS. CHRISTY & CO.
4-12 Old Swan Lane, London, E.C.4

Which will you do?

OR SELL

Waste time and energy
in selling an unknown and
inferior brand of Malt and
Oil, and risk dissatisfaction
on the part of your
customer

'KEPLER' Cod Liver Oil

TRADE

MARK

with Malt Extract

which is quickly and easily sold.
Satisfies your customer.
Enhances your reputation.
Yields a good profit.



In bottles of two sizes,
at 30/0 and 54/6 per doz.
(Subject to usual terms)

Choose the better way—
Sell 'KEPLER'
Cod Liver Oil with Malt Extract



BURROUGHS WELLCOME & CO.
LONDON

BAYER PRODUCTS

Have the Confidence
of Physicians

For that reason no pharmacy is complete without an assortment, so as to fill prescriptions promptly. Their sale is guaranteed. All wholesalers carry them in stock.

"Luminal" "Optarson" "Sajodin"
"Guycole" "Butolan" "Helmitol"
"Jothion" "Aspirin" "Trional"
"Novasurol" (Bayer) "Protargol"
"Adalin" "Aristol" "Alypin"
"Salophen" "Somatose" "Tannigen"
"Mesotan" "Theocin-Sodium-Acetate"



Price List on Request.

Tel. No.:
Chiswick 2433.

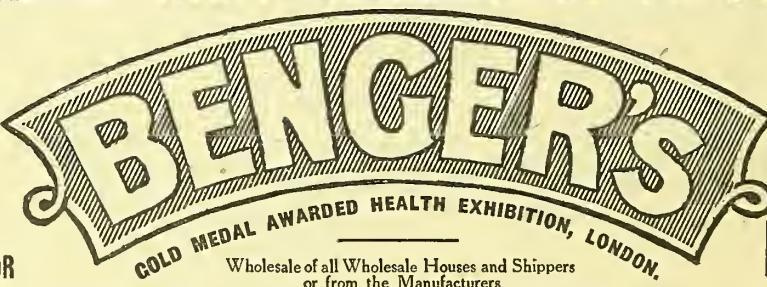
BAYER PRODUCTS, Ltd., 1 Warble Way, Acton Vale, W.3

Tel. Add.:
Bayaprod, London.

(Registered Trade Marks.)

The *Lancet*
describes it as
"Mr. Benger's
admirable pre-
paration."

FOOD FOR
INFANTS



BENGER'S FOOD LTD., Otter Works, MANCHESTER, Eng.

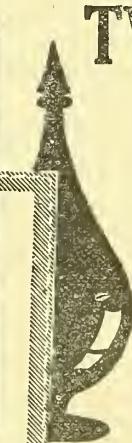
Branch Offices at: 117 Pitt St., Sydney, Australia; 90 Beekman St., New York, U.S.A.
Canadian Agents: The National Drug and Chemical Co., Ltd., Montreal and Branches.
SHOWCARDS AND HANDBILLS ON APPLICATION.

The British Medi-
cal Journal says:
"Benger's Food
has by its excel-
lence established a
reputation of its
own."

INVALIDS
AND THE AGED.



Py-Shan Points Tea
is the line that helps
you to make your
dreams come true.
Put aside the steadily
mounting profits and
it quickly forms a
handy banking account
that assists you to
realise the enjoyment
of your pet hobby.



PER
POUND
PROFIT

TWO PHARMACY SYMBOLS

Packets of Py-Shan Points Tea, like carboys, are found only in chemists' shops, because Py-Shan Points is exclusively a pharmacy line.

Thousands of doctors throughout the country recommend Py-Shan Points as the ideal Tea for the invalid. It is composed wholly of the tender shoots and delicate tips of the young leaves. It is so profitable that hundreds of chemists are already enthusiastic distributors of this famous line.

PY-SHAN
POINTS
TEA

This profitable line is strongly backed by effective publicity literature. Its good qualities are emphatically endorsed with liberal supplies of showcards, leaflets and free samples.

Py-Shan Points Tea is put up in 4, 8 and 16 oz. cartons, and retails at 3/4 per lb., and sold to you at 2 11 per lb., less 2d. per lb. on quantities of 10 lb. and upwards if cheque enclosed with order. 25 lbs. carriage paid.

THOS. CHRISTY & CO
4-12 OLD SWAN LANE, LONDON, E.C.4



A WEEKLY JOURNAL OF PHARMACY AND OF THE CHEMICAL AND DRUG TRADES

THE CHEMIST AND DRUGGIST is in circulation and reputation the leading journal addressing the Chemical and Drug trades in the British Empire and other countries in the Old and New Worlds. It is the official organ of the Pharmaceutical Society of Ireland, the Chemists' and Druggists' Society of Ireland, and of other Chemists' Societies in the Overseas Dominions.

SUBSCRIPTION RATE

TWENTY SHILLINGS a year payable in advance to any part of the world, including a copy of *The Chemist and Druggist Diary*. Subscriptions may begin with the first issue of any month. Single Copy, 9d., post free; *Diary*, 10s., post free. Postal orders and cheques should be crossed "Bank of Liverpool and Martins, Ltd."

Prix de l'abonnement annuel : le journal une fois par semaine, et l'agenda une fois par an, 20s., francs.

TERMS FOR ADVERTISING may be obtained on application to the Publisher.

Head Office : 42 CANNON STREET, LONDON, E.C.4

Telegrams : "Chemicus, Cannon, London." Telephone : Central 3617 (3 lines).

Branch Offices : 49 County Buildings, 4 Cannon Street, Manchester. (Telephone : City 52.)

Melbourne and Sydney, Australia.

Contents

No. 4	Series 2296	Vol. 100	
Bankruptcy Reports	PAGE	PAGE	
Births	117	Gazette	111
Books, New	123	Information Department	124
Business Changes	121	Insurance Remuneration factors	133
Chemical Society	122	Irish News	111
Colonial and Foreign News	113	Legal Reports	114
Colour Reactions	130	Marriages	123
Coming Events	132	New Companies and Company News	117
Correspondence :		Observations and Reflections	125
Letters	142	Panel Practice Inquiry	118
Subscribers' Symposium	143	Personalities	122
Legal Queries	143	Pharmaceutical Botany	120
Miscellaneous Inquiries	144	Poisonings	109
Deaths	123	Recent Patents	121
Dispensing Tested	116	Retail Pharmacists' Union	119
Editorial Articles :		Retrospect	144
Cocaine Eye-drops	126	Royal Institution	118
Oilseeds and Oils	127	Scottish News	112
Insurance Dispensing Terms	128	Trade-marks	133
English News	109	Trade Notes	124
Festivities	134	Trade Report	136
French News	112	Westminster Wisdom	121
Gas Company Case	115	Wills	123
		Winter Session	135

No. 4	Series 2296	Vol. 100	
Bankruptcy Reports	PAGE	PAGE	
Births	117	Gazette	111
Books, New	123	Information Department	124
Business Changes	121	Insurance Remuneration factors	133
Chemical Society	122	Irish News	111
Colonial and Foreign News	113	Legal Reports	114
Colour Reactions	130	Marriages	123
Coming Events	132	New Companies and Company News	117
Correspondence :		Observations and Reflections	125
Letters	142	Panel Practice Inquiry	118
Subscribers' Symposium	143	Personalities	122
Legal Queries	143	Pharmaceutical Botany	120
Miscellaneous Inquiries	144	Poisonings	109
Deaths	123	Recent Patents	121
Dispensing Tested	116	Retail Pharmacists' Union	119
Editorial Articles :		Retrospect	144
Cocaine Eye-drops	126	Royal Institution	118
Oilseeds and Oils	127	Scottish News	112
Insurance Dispensing Terms	128	Trade-marks	133
English News	109	Trade Notes	124
Festivities	134	Trade Report	136
French News	112	Westminster Wisdom	121
Gas Company Case	115	Wills	123
		Winter Session	135

Appreciations

Your admirable and progressive paper.—H. O. (24/12). Since my apprentice days in 1885 you have never failed me.—T. E. (3/1).

Your journal and price list are the acme of pharmaceutical literature.—W. E. W. (10/1).

The *C. & D.* is like a parent, always willing to give advice and help at all times.—P. G. C. (10/1).

The paper is of the greatest service to us, and you are to be congratulated on the excellence of your *Diary*.—S. L. (7/1).

I can only add my appreciation of your weekly publication to the great number already expressed in better words than I can frame. It is a welcome visitor to the cold and frozen country north of the Tweed, and keeps the natives in touch with the happenings throughout the Empire. There is generally a fearlessness displayed in its columns that appeals to the timid, self-effacing—any other suitable adjective you like—temperament of Scotsmen.—J. F. (15/1).

English and Welsh News

The Editor would be obliged if subscribers will send him marked copies of newspapers containing items of interest for insertion in this or other news sections.

Strike of Locomotive Workers

At midnight on January 20, a strike ordered by the Associated Society of the Locomotive Engineers and Firemen on a question of wages came into operation. The stoppage was denounced by the National Union of Railways.

Reports from various parts of the country indicate that considerable dislocation of passenger and goods services occurred during the first day, a state of affairs appreciably mitigated on succeeding days. Personal experiences vary; in London and in the provinces alike, many people have been able to travel in normal comfort, and rearranged conferences and similar gatherings have begun punctually. Others have not been so fortunate. The supply of perishable goods has been well maintained, but the situation respecting coal has given rise to some anxiety. The mails have been irregular.

Claim in Respect of Mustard Gas

The hearing of the claim of Dr. H. Levinstein and Professor A. G. Green, in respect of a process for the manufacture of mustard gas (*C. & D.*, December 22, 1923, p. 847), was continued by the Royal Commission on Awards to Inventors on January 21. For the Crown, Mr. J. Hunter Gray, K.C., contended that no assistance was given by the claimants to Government departments to enable them to produce mustard gas. He disputed a suggestion that the claimants' plant worked smoothly. An extract from one of their works log-books stated that, unless something drastic were done, it was too much to expect anyone to stay. One of the men, stated the entry, had come in with his eyes useless, and another had to be led home. Counsel asked if it were conceivable that such observations would be made if the plant had been working smoothly. Mr. Justice Tomlin, who presided, remarked that the real case the Crown had to face was that, whatever the difficulties, the claimants succeeded in producing what was required, while at the Government factory there was not the same measure of success. Mr. Gray replied that for 575 tons of mustard gas produced in England the French production was 1,950 tons, and a Government expert was sent to investigate the French process. Sir William Pope gave evidence as to experiments that he made early in 1918, and as to the technical processes of manufacture of mustard gas from sulphur chloride. The hearing was again adjourned.

Poisonings

The following cases of fatal poisoning, among others, have been recorded since our last report:

A verdict of "Suicide" was returned at an inquest on January 19 on the body of Frederick Allard, labourer, Hawkbridge, Worcester, who died from drinking carbolic acid.

An inquest was held in North London, on January 23, on the body of Walter Alder, café proprietor, Winchmore Hill, who, the evidence showed, had been found dead in bed. A son of the deceased was shown a chemist's poison-book in court, and identified his father's signature in it; the article purchased was a rat-poison. Dr. Lynch (Home Office) stated that he had found $\frac{1}{2}$ gr. of strichnine in certain organs submitted to him. He estimated that there must have been $\frac{1}{2}$ gr. in the body, sufficient to account for death. The rat-poison that he analysed contained several grains of strichnine. Mr. Alfred Hornby, Ph.C., Winchmore Hill, said he remembered Alder signing the poison-book on December 22 in respect of a purchase of rat-poison. Alder had purchased such poison previously. A verdict was given to the effect that Alder died from strichnine poisoning, and that there was not sufficient evidence to show how it was administered.

At Grimsby, on January 18, the inquest on the body of Mr. William Hughes Ridge, dentist, who died on January 1 (*C. & D.*, January 12, p. 38), was concluded.

The borough analyst (Mr. J. A. Foster) now stated that in the stomach submitted to him there was a large quantity of potassium cyanide. Analysis of the packet found showed the presence of 21.5 grams of cyanide. If it had originally contained 1 oz., then 100 gr. was missing. In his opinion, the deceased had taken the potassium cyanide in its solid condition, washing it down with water. A fatal dose was anything from 2 gr. to 10 gr. The Coroner: Assuming that the original quantity in the packet was 1 oz., the deceased must have taken from ten to fifty times the amount sufficient to destroy human life?—Yes. In returning a verdict of "Suicide while of unsound mind," the Coroner remarked that the deceased was a brave and patriotic man who had served his country with distinction.

Birmingham

There is an epidemic of influenza in this district.

The exhibits of the University at the Midland Institute conversazione included dyestuffs from Professor Morgan and his research students, and oils, paints and varnishes from Dr. Newton Friend.

The number of receiving orders made in the Birmingham district, comprising Birmingham, West Bromwich, and Worcester, during the past year was the highest since 1907, the total being 153, of which 115 were in Birmingham.

Mr. W. Marshall Freeman, barrister and pharmacist, chairman of the Greater Birmingham Unemployment Committee, states that Birmingham has 40,000 unemployed—20,000 above the normal—and urges the City Council to hasten with its canal scheme.

At the postal conference held at Birmingham, on January 21, under the auspices of the Association of British Chambers of Commerce, the chairman said he would like to hear discussed whether the Post Office could not be placed in the hands of a permanent outside commission which, after being provided with adequate capital funds, would run this gigantic business on business lines. The resolution advocating Imperial penny postage was carried unanimously, but that relating to a cash-on-delivery system was condemned. The suggested removal of restrictions on the printed-paper rate met with some opposition.

Leicester

Quite a number of chemists in this area have intimated their intention of applying for off-licences for the sale of medicated wines only.

First-aid boxes occupy conspicuous positions in many pharmacies. The sending out of circulars direct to factories by wholesalers who expect orders from retailers is not regarded favourably by local chemists.

At the annual meeting of the Leicester Chamber of Trade, Mr. G. E. Marfitt, chemist and druggist (President), spoke of the deplorable condition of the Market Place, the unsightly stalls being in position the whole of the week instead of two days, as before the war. It was suggested that the square be made into a tramway centre, and so relieve congestion. Traders whose premises adjoin the Market Place, while agreeing with the Chamber of Trade that that part of the city is not as tidy as it might be, regard the stalls as an asset in bringing people to their doors, and are not anxious for their removal.

Liverpool

The annual dinner of the Liverpool Chemists' Association will take place on February 27, at the Adelphi Hotel.

Mr. Harold Wyatt, J.P., Ph.C., the re-elected Vice-President of the Liverpool Chemists' Association, was prevented from attending the annual meeting owing to temporary indisposition.

Several well-known Liverpool Freemasons attended at Preston, on January 16, the installation of Mr. Joseph Fearon Burnett, Ph.C., 254 Fylde Road, Preston, as W.M. of the Lodge of Concord, 343.

Joseph Metcalfe, Mount Vernon Road, was sentenced on January 18 by the Liverpool Stipendiary to six months' hard labour for being in possession of two "boxes" of morphine and two syringes.

Mr. T. S. Wokes, Ph.C., Grassendale Pharmacy, Grassendale, has opened a bio-chemical laboratory for the examination of blood, urine, and other clinical material. The laboratory is in charge of Mr. Frank Wokes, B.Sc., Ph.C., A.I.C. [Corrected note.]

Sir Dyce Duckworth, who recently gave a reminiscent lecture at the Royal Institution, Liverpool, won a prize (a microscope) given by the Liverpool Chemists' Association about fifty years ago. Mr. Humphreys Jones has culled the fact from his compilation of the minutes.

Sheffield

Mr. H. B. Hammond is to address the Stockton-on-Tees branch of the Pharmaceutical Society shortly.

Chemists must not accept the second copy of the new Insurance prescription forms.

Mr. Berry, Duke Street, has acquired a site near his present business for the erection of larger premises.

Mr. C. H. Bradwell, chemist and druggist, Shoreham Street, is making satisfactory progress following his recent operation.

At Rotherham Police Court, recently, John Woolfson, Mexborough, described as a chemist, was fined 15s. for boarding a train in motion at Swinton.

Mr. G. J. R. Parkes, chemist and druggist, representative of The British Drug Houses, Ltd., has relinquished the part of his ground north of Leeds and Bradford, and his visits to Sheffield will be more frequent.

The suggestion that glass is not a suitable material for food containers owing to the likelihood of splinters causing appendicitis and cancer is refuted by Professor Turner (Department of Glass Technology), who has consulted leading pathological and surgical experts on the subject.

Mr. Ernest Preston, Ph.C., will introduce the forthcoming discussion on Insurance dispensing (*C. & D.*, January 5, p. 2) instead of Mr. H. G. Williams, who met with an accident while starting his motor car recently, and is likely to be away from business for a few weeks.

Miscellaneous

PHARMACY HOCKEY LEAGUE.—Burroughs Wellcome & Co. followed up their victory over J. W. Bush & Co., Ltd., by nine goals to one, on January 12, by inflicting a similar defeat, on January 19, on the London College of Pharmacy.

P.A.T.A.—Mr. W. C. Birks, of Raimes & Co., York, points out that it was his firm and not Raimes, Clark & Co., Ltd., Edinburgh, that was elected to the wholesale section of the Proprietary Articles Trade Association at the meeting on January 10. (*C. & D.*, January 19, p. 98.)

FRAUDULENT CONVERSION CHARGE.—At Mansion House Police Court, London, on January 17, Walter H. Gerson, St. Bride Street, E.C., was committed for trial on charges of fraudulent conversion (*C. & D.*, December 22, 1923, p. 852). The defendant, who pleaded "Not guilty," was allowed bail.

KELVIN CENTENARY.—Arrangements are being made by a committee of the Royal Society for a celebration of the centenary of the late Lord Kelvin's birth, which occurred on June 26, 1824. July 10 and July 11 have been selected as convenient dates for the functions, which include a memorial oration by Sir Joseph Thomson and a dinner under the chairmanship of the Earl of Balfour.

UNAUTHORISED POSSESSION CASE.—At Manchester City Police Court, on January 21, H. Herman (17), Cheetham, and S. Heilpen (19), Broughton, were each sentenced to three months' imprisonment for being in unauthorised possession of cocaine. It was pleaded in extenuation that

a German visiting Manchester showed one of the defendants a document purporting to give permission to deal in cocaine.

SALE OF FOOD AND DRUGS ACTS.—The system of taking samples under the Sale of Food and Drugs Acts has been criticised by the chief constable of Worcestershire, who suggests that test samples only should be purchased in the first instance, and that wives of police officers might be employed for the purpose. A police officer, it is added, should not be sent until there is a suspicion of adulteration. The suggestion was adopted, with the addition of "other police agents" to the policemen's wives, at a meeting of the Standing Joint Committee on January 19.

TYPEWRITERS MISSING.—At Tower Bridge Police Court, London, on January 22, Frank Murphy, Union Street, Southwark, and Clifford John Hart, the "Union Jack," Union Street, were charged with being concerned together in breaking and entering into 34, 36 and 38 Union Street, and stealing two typewriters, value £68, the property of Thomas Keating, manufacturing chemists. Police evidence showed that Murphy said he had deposited the two machines with Hart, who had advanced £8 on them. Hart denied this. The accused were remanded.

INQUEST.—At an adjourned inquest held at Melton Mowbray, on January 16, on the body of Charles H. Curtis, aged ten months (*C. & D.*, December 15, 1923, p. 812), Dr. Bernard Dyer certified that there was no evidence of morphine in the stomach, and there was only a doubtful trace of it in the intestines. In the liver, morphine was distinctly traceable, but in minute quantity. Dr. Mary Elliott, who attributed death to acute bronchitis, said that after hearing Dr. Dyer's analysis she had come to the conclusion that the cough mixture previously referred to was inadvisable for administration to children under two years of age. A verdict was returned in accordance with the medical evidence.

INSTITUTE OF CHEMISTS-OPTICIANS.—At a recent meeting of the Institute, the secretary, who had been appointed to approach the approved societies as to the future working of optical benefits, reported that the National Union of Insurance Approved Societies officially stated that this society is cutting out optical treatment from its scheme of additional benefits. Other societies may be expected to follow on these lines until an official statutory register is established and all chemists are urged to strengthen the hands of the Institute for the coming Optical Bill by joining now. Particulars may be obtained from the general secretary, Mr. J. J. Laws, 45 Fulham Road, South Kensington, S.W.3, or from the following corresponding representatives:—Yorkshire, Mr. S. N. Pickard, J.P., Ossett, Yorks; Glasgow, Mr. M. H. Stone, 171 London Road, Glasgow; Buckinghamshire, Mr. C. Rayner, Station Parade, Gerrards Cross.

IN THE COURTS.—At Folkestone, on January 19, Gabrielle G. Destress, London, was fined £5 9s. 4d. for having attempted to convey perfumery into this country without paying duty.—At Blackburn, on January 21, John Dyce, Rishton, was summoned for having stolen a tin of bronchial lozenges from the Church Street shop of Boots, Ltd. Dyce was fined 10s. for using bad language, but the charge of stealing was withdrawn.—At Marlborough Street Police Court, London, on January 21, Joseph Scholles was fined £2 for having supplied sponge cake containing 19.11 gr. of boric acid per lb.—In the King's Bench Division of the High Court, London, on January 23, Major G. J. Ball, Upper Norwood, S.E., was awarded £70 damages, with costs, against Dr. J. A. Howard, Church Road, S.E., for personal injuries due to the negligence of the defendant in his professional capacity. The defendant succeeded on a counter-claim for fees.

CONSPIRACY CHARGE.—At Marlborough Street Police Court, London, on January 19, Noel Blake Ducker, company director, was again charged on remand with conspiracy in respect of income-tax and excess profits duty (*C. & D.*, January 12, p. 38). This was said to be the

sixteenth hearing. Mr. F. N. D. Preston, for the Inland Revenue authorities, pointed out that the Crown was infinitely the largest creditor in the liquidation of the company, the amount due being £15,000. Not only was there a conspiracy between the defendant and his brother to defraud the Revenue, but after the frauds were discovered, and it became clear to them that a very large sum of money was payable to the Revenue, so far from making any attempt to make reparation or to meet the just claims of the Crown, they did everything in their power to dispose of the property to themselves and to other companies in which they were interested. Mrs. Ward, a witness at the previous hearing, was cross-examined, and evidence was given by Mr. H. H. Bailes, an official from Somerset House. The case was again adjourned.

Irish News

Pharmaceutical Society of Ireland

Members and associate druggists who have not yet paid their subscriptions (31s. 6d.) for the current year should do so at once, in order that *THE CHEMIST AND DRUGGIST* may continue to be issued to them.

Brevities

Tyrconnell County Council has appointed Mr. J. G. O'Leary, Dublin, as county analyst.

The Committee of Management of the North Infirmary, Cork, has awarded the contract for the supplies of medicines to the institution to Fieldings' Pharmacy, Patrick Street, Cork.

At Newcastle, co. Down, Petty Sessions, on January 17, a man named James O'Neill, Newry Street, Rathfriland, was fined £1 15s. and costs for making a false statement to procure methylated spirits from George Shannon, Ph.C., Castlewellan. The case against Mr. Shannon, who was also summoned for failing to have the name of the seller on the bottle, was dismissed.

Belfast

Mr. T. W. McMullan, M.P. (Thomas McMullan & Co., wholesale druggists), is about to visit South America.

Mr. Alfred Dornan, the new President of the North and West of Ireland Commercial Travellers' Association, was formerly on the staff of John Clarke & Co., Ltd., chemists, Belfast.

At the Claims Court, on January 17, Dr. S. E. A. Acheson, who claimed £1,000 for the alleged malicious destruction of the Medical Hall, Cromac Street, was given a decree for £360.

Londonderry

The tender for supplying medicines, etc., to Londonderry District Lunatic Asylum has been obtained by Fred Storey, Ltd., Belfast.

Mr. Joseph Wellwood, Ph.C. (Craig & Wellwood, Ferryquay Street), has been elected chairman of Londonderry Chemists' and Druggists' Association for the year, and Mr. A. E. Dickson, Ph.C., re-elected secretary and treasurer.

Dr. W. A. Frizzell, Ph.C., Mr. H. E. Young, Ph.C., and Mr. James Glendinning, Ph.C., were among the guests invited to the civic reception for the conferring of the freedom of Londonderry on Sir James Craig, the Northern Premier.

Gazette

Partnership Dissolved

SHARLAND, C., and SHARLAND, C. N. A., Eldon Street House, Finsbury, London, E.C.2, drug, chemical and sundry exporters, under the style of Sharland & Co.

Scottish News

Brevities

Replying to Mr. Cox in the "Ardrossan and Saltcoats Herald," January 20 (see *C. & D.*, January 19, p. 74), Mr. Meldrum points out that he is not responsible for a meeting not having been called. Pharmaceutically, Ayrshire is divided into North and South, each area having its own association, and as secretary of the southern association he has received no intimation of a desire for a joint meeting since May 1923.

The proposal of A. & R. Scott, Ltd. (Scott's Midlothian Oatmeal Food), to extend their works at Colinton has been the subject of considerable public controversy, the chief contention of those objecting to the scheme being that Colinton is in danger of being spoiled as a beauty spot. A protest meeting was held in the Parish Hall on January 21, and after several speeches, Mr. R. D. Lauder, resident manager of the mills and a director of the company, said he wished to correct a mis-statement. It had been stated that the mills were purchased for £400 about fifteen years ago. Actually, they were valued at £21,000. Since that time his company had made extensions which had increased their value, so that the small extension proposed was not so enormous in comparison. The chairman presently considered it would serve no good to continue the meeting further. There was no doubt that the preponderance of the audience there was in favour of telling the company to go on. Before the meeting broke up Mr. Lauder pointed out that his co-directors were anxious to consider the point of view of the objectors, and he was glad to say that the suggestion that terms might yet be arranged need not fall to the ground. A conference was arranged to take place shortly.

Dundee

The tender of Mr. C. Young, chemist and druggist, for supplying drugs and dressings to the local venereal diseases centre has been accepted.

Under the auspices of the civic authorities it is proposed to hold in Dundee, on February 13, a conference of delegates from the principal Scottish cities and burghs to inquire into the best method of dealing with the evil of methylated spirit drinking.

At Dundee Sheriff Court, on January 21, James Owen was sent to a Borstal institution for three years and W. McDermott was placed on six months' probation for committing a number of burglaries, among which was one, in November last, at the premises of Mr. J. Anderson, chemist and druggist, 70 Commercial Street.

Edinburgh

Mr. W. H. Chambers has joined the representative staff of Harkness, Beaumont & Co.

The Edinburgh Chemists' Golf Club will hold their second whist drive of the season at Pfeiffer's Rooms, 82 Great King Street, on February 20. Tickets (4s. 6d. each) may be obtained from any member of the committee.

Glasgow

Mrs M. Buchanan, chemist and druggist, has commenced business at the Blythswood Medical Hall, 298 Glasgow Road, Clydebank.

Professor F. O. Bower, Sc.D., President of the Royal Society of Edinburgh, who occupies the Chair of Botany in Glasgow University, is the author of a series of botanical articles appearing in the "Glasgow Herald," the first of which was published on January 19.

The creditors of R. J. S. Blackwood, chemist and druggist, late 64 St. George's Road, Glasgow, were called together recently when a statement of affairs was submitted which disclosed liabilities of £1,806 16s. 5d., all due to unsecured creditors, while there was a deferred claim for £500. The assets amounted to £1,782 6s. 8d., and consisted of : shop stock and fittings, £1,037 2s. 11d., estimated to realise £1,019;

book debts, £7 9s. 9d.; shop takings, less wages, etc., £62 2s. 3d.; proportion of rent and rates recoverable from purchaser, £144 13s.; and house at 13 Selborne Road (£950, less net balance of loan and interest, £400 18s. 4d.), £549 1s. 8d. After deducting preferential claims of £256 16s., the net assets amounted to £1,525 10s. 8d., or a deficiency of £281 5s. 9d. It was reported that the debtor started business about twenty years ago. In September last he executed a trust deed and the business was sold privately for £1,000, the purchaser entering into possession on December 13. The liabilities included £843 due to the trade, while the balance was in respect of loans. It was decided that the estate should be realised under the trust deed, and a committee of three of the principal creditors was appointed to act with the trustee. The following are among the creditors:—George Carr & Co., Ltd., £10; Coate & Co. (Axminster), Ltd., £16; Fassett & Johnson, Ltd., £12; John J. Griffin & Sons, Ltd., £26; E. Griffiths Hughes, Ltd., £10; Harkness, Gallacher & Ruff, Ltd., £28; D. Lamont, £665; S. Maw, Son & Sons, Ltd., £71; A. & F. Pears, Ltd., £10; Pritchard & Constance (Wholesale), Ltd., £11; Pharmacists' Mutual Supply Association, Ltd., £25; James Taylor (Trongate), Ltd., £126; The United Sponge Co., £19; E. C. De Witt & Co., Ltd., £27; Whitaker & Co., £10; Thew, Hooker & Gilbey, Ltd., £13.

French News

(From the "C. & D." Paris Correspondent.)

PROFESSIONAL EDUCATION.—In some remarks on the trend of modern pharmacy, Professor Cazeneuve notes that all the French Faculties have now organised lectures on pharmaceutical legislation, and that the Lyons Mixed Faculty has started a facultative course in bacteriology. He considers that the latter study should be taken up at all centres of pharmaceutical education.

MILITARY PHARMACISTS' EXAMINATION.—The 1923 examination for the diploma of pharmacist-chemist of the French Military Sanitary Service included a qualitative analysis of a saline or gaseous mixture, and the estimation of one or more of its constituents, the analysis of a liquid (urine, wine) and the detection of a poison: jam containing oxalic acid; cake with (1) fluosilicate of sodium, (2) veronal.

STUDENTS' DELEGATES.—In accordance with last year's ministerial decree, the students of the Paris Faculty of Pharmacy have elected six delegates as their representatives on the Council of the University of Paris. The successful candidates were MM. Martin, Vignier, Pinguet, Jeunet, Lechevin and Grenet, the President, treasurer, assistant treasurer, and secretary of the Amical Association of Students of Pharmacy, and two of its members.

THE LABORATORIES FUND.—At a meeting held at the Ministry of Public Instruction, M. Léon Bérard, in the name of the Government, thanked all who had contributed to the success of this national subscription. M. Coville, Director of Higher Education, said that although the French budget for 1923 included a charge of 83,000,000 francs for the staffs and laboratories connected with higher education, and although 38,000,000 francs were annually spent on French scientific establishments, these were still in a bad state. The laboratories of the College of France, of the Museum, of the Ecole Normale, were "falling to pieces." In other places, the Faculty of Sciences, for instance, a sumptuous outer aspect served only to mask insufficient equipment. M. Picard, perpetual secretary of the Academy of Sciences, replied that the 13,000,000 francs which had been collected would be spent in providing laboratory apparatus, and not otherwise. M. Vidal, under-secretary for technical education, said he hoped the effort was not at an end. For not only had money been collected, but a new impetus given. Only a few weeks ago they had received a legacy of 6,000,000 francs for a technical school, and now another 20,000,000 francs was promised for a similar object.

Colonial and Foreign News

SWISS DUTY ON SODA.—The Swiss Federal Council has raised the duty on soda in crystals (tariff No. 1,040) from 1 franc to 4 francs per 100 kilograms.

CHILEAN IODINE EXPORTS.—During the first six months of the past year Chile exported 174,646 kilograms of iodine (January-June 1922: 135,295 kilograms), valued at 4,171,634 gold pesos. The total exports of iodine during 1922 amounted to 235,705 kilograms.

DUTY-FREE IMPORTS INTO COSTA RICA.—The following additions to the list of drugs which may be admitted free of duty into Costa Rica (*C. & D.*, II, 1923, p. 787), have been made by decree No. 4,162 of the minister of finance: Mercuric chloride, mercurous iodide, mercuric iodide, neoarsenamine and neosalvarsan.

PHARMACIES CHANGE NATIONALITY.—In consequence of the recent rectification of the frontier between Rumania and Jugo-Slavia, a portion of formerly Hungarian territory allotted to both countries has undergone re-distribution, with the result that Rumania has gained an addition of six and lost two pharmacies.

CHEAPER TELEPHONES FOR HUNGARIAN DOCTORS.—On the grounds that the doctors perform their duties in the interest of the public, the Hungarian Minister of Commerce has granted members of the medical profession a rebate of 50 per cent. on their telephone charges. The Hungarian Association of Pharmacists has taken steps to secure the same treatment for its members, pointing out that a pharmacy is just as important a factor in the maintenance of health.

TASTELESS COD-LIVER OIL.—According to a note in the "Stavanger Aftenblad," Professor J. Hjort, who is well known for his research work on vitamins in fish oils, has succeeded in elaborating a process for eliminating the specific taste of cod-liver oil, whereby a palatable oil is obtained, with a high vitamin content. It is stated that the necessary capital has been subscribed to carry out the process on a commercial scale, with a production of about 500 barrels during the present winter.

NORWEGIAN SPIRIT PRICES.—Prohibition is in force in Norway, and spirituous beverages may be supplied by pharmacists only on a medical man's prescription, at the prices fixed in the drug tariff. An order of the department for social matters reduces the discount granted by the wine monopoly company, the sole official wholesale distributors of alcohol in its various forms, to pharmacists on purchases of spirits from 25 to 20 per cent., whereby the retail prices to the public remain unchanged.

THE RUMANIAN PHARMACISTS' CREDIT INSTITUTE has now been constituted and registered in Bucharest. Its objects are to undertake the wholesale importation of drugs and chemicals for distribution to pharmacists and druggists, and also to supply the requisite funds to purchase the houses in which pharmacies are conducted. The capital is to amount to 20,000,000 lei, the shares being payable in twelve monthly instalments; all financial matters will be handled by the Banca Romaneasca.

EASTON SYRUP TABLETS IN DENMARK.—Numerous instances having occurred in Denmark of children being poisoned by taking, through lack of proper supervision, an excessive number of Easton syrup tablets, believing them to be sweets, the Board of Health has issued a circular to all Danish pharmacists requiring them to affix on every package of Easton syrup tablets sold to the public a slip bearing in red letters on white paper the reminder: "Caution—keep out of the reach of children."

INSULIN is being manufactured in the bacteriological laboratory of the national health department of Buenos Aires (says the "Journal of the American Medical Association"), according to a method suggested by Dr. A. Sordelli. A pancreas extract prepared by the methods of Somogyi, Doisy and Shaffer is precipitated with picric acid; the picric acid is then extracted from the precipitate with acetone, and the resulting product purified by iso-electric precipitation. A committee has been ap-

pointed to study insulin, train physicians in its administration, etc. Dr. Sordelli read a paper upon the drug at the annual congress held recently by the Argentine Medical Association.

POST PARCELS TO SAN SALVADOR.—From February 1, 1924, all invoices for consignments dispatched to San Salvador as post parcels will have to be certified by a consul of that state, or, where there is no San Salvadoran consulate, by the consul of any South or Central American state. The invoice (in quadruplicate) must be made out in Spanish and must contain the number of the parcel, exact gross and net weights, and complete description of contents. No charge will be made by San Salvadoran consulates for certification, as the fees will be collected from the recipient of the parcels. Parcels not accompanied by a certified invoice will be liable to a 25 per cent. surcharge on the leviable amount of customs duty.

NEWS FROM JUGO-SLAVIA.—It is proposed to create thirty new pharmacies in Serbia, in addition to opening seven new businesses in Belgrade. Pharmacist-Major A. Okolicanyi has been appointed director of the new section for military pharmacy in the Health Department of the Ministry for War and the Navy. The pharmaceutical profession of Jugo-Slavia is protesting against the suppression of the pharmaceutical section in the Ministry of Health. This section, which had been in existence for four years, has recently been abolished for reasons of economy. The first to obtain the newly created diploma of Chemical Engineer at the University of Zagreb is Master of Pharmacy V. Brajkovich, editor of the journal of the Association of Pharmaceutical Assistants in Jugo-Slavia.

PROPRIETOR'S PRESENCE REQUIRED.—A provision included in the regulations recently issued by a Brazilian board of health required the permanent attendance in the pharmacy during such hours as it is open to the public of the actual proprietor of the business. Since businesses remain open from 8 a.m. to 8 p.m., this would mean that during this period of the day the owner could not absent himself for a single moment from his business without the risk of incurring a fine. A deputation from the Association of Proprietors of Pharmacies and Laboratories, after making representations to the inspector of the exercise of medicine and pharmacy, succeeded in securing an alteration of this provision, to the effect that the proprietor's presence is required during the busiest hours of business.

SWISS DANGEROUS DRUGS BILL.—One of the reasons adduced by the Swiss Government to defend its attitude in delaying to ratify the Hague Opium Convention was that legislation regulating the traffic in drugs was the prerogative of the individual cantons, and that the Federal Government was by the Swiss Constitution not empowered to promulgate legislation dealing with this matter. This difficulty has now been overcome, and the draft of a Federal law on narcotics has been submitted to the Swiss parliament. It closely follows the legislation already in force in the other countries which were signatories to the Opium Convention. Dealers and manufacturers handling opium in all its forms, morphine and morphine salts and preparations containing more than 0.2 per cent. of morphine, heroin, cocaine, their salts and preparations containing more than 0.1 per cent. of either, are required to obtain a special licence. Pharmacists keeping open shop, hospitals, scientific institutions, medical practitioners, dental and veterinary surgeons dispensing their own medicines do not require any special authorisation. All firms and persons, including pharmacists, handling these drugs are required to keep a special register in which the stocks, the amounts purchased, supplied or sold of each drug have to be entered. The importation and exportation of raw opium is prohibited. The penalties provided for transgressions include fines ranging from 1,000 to 5,000 francs, in addition to six months' imprisonment; if the offence is repeated a fine not exceeding 10,000 francs, or one year's imprisonment, may be inflicted; in certain cases these penalties may be doubled.

Legal Reports

Alleged Infringement of Copyright.—In the Chancery Division of the High Court, London, on January 18, Mr. Justice P. O. Lawrence heard a motion by Kolynos, Inc., for an interlocutory injunction restraining an alleged infringement by The Cotswolds Laboratories of the plaintiffs' copyright in a pamphlet entitled, "Kolynos—Scientific Dentifrice." It was stated by Mr. Jenkins, K.C., for the plaintiffs, that they had received a letter to the effect that the defendants did not intend to appear. The injunction was granted in the terms of the motion until the trial of the action.

Drug-traffic Sentence Affirmed.—In the Court of Criminal Appeal, on January 21, Yasukichi Miyagawa, sentenced to three years' penal servitude, recommended for deportation to Japan, and ordered to pay the costs of his prosecution for offences under the Dangerous Drugs Acts (*C. & D.*, December 15, 1923, p. 817), appealed against his conviction. Sir Henry Curtis Bennett, K.C., for the prisoner, submitted that there was no evidence of procuring the drug in the City of London. Consequently no offence as charged in the count of the indictment had been committed. The whole point was whether, if the prisoner only had the bills of lading for the drugs, he could be said actually to have procured the drugs themselves. Counsel stated that prisoner did not wilfully break the law. In dismissing the appeal, the Lord Chief Justice said it was not true that there could be no charge of procuring morphine when the drug was not in the possession of the purchaser. The argument involved and was based upon the proposition that within the meaning of the Act of 1920 and its Regulations, whatever might be said of the Act of 1923, there could not be a procuring by a person in this country unless the drugs the subject of the charge were actually, or were intended to be, physically in this country. This proposition derived support from neither of the Acts referred to, although it was clear that the Act of 1923 threw the net more widely than the Act of 1920. It became clear from experience that there might be acts done of a preparatory character which the legislature thought it right to penalise, although those acts fell short of even an attempt to commit the act prohibited by the statute of 1920. As to the sentence, there were many things in the case which made it impossible for the Court to attribute to the appellant an innocent mind. The appeal must be dismissed.

A Deal in Medicine Tumblers.—In the Mayor's and City of London Court, on January 22, H. Fonesca, Ltd., glassware importers, Queen Victoria Street, E.C., claimed the sum of £31 18s. 4d. against Hollings' Patent Sand Blast Company, Sudbury, Suffolk, for goods supplied. Mr. Frost Ward appeared for the plaintiffs, and Mr. C. H. Hollings represented the defendants. Mr. Ward said the claim was for glass bottles supplied and involved an order to supply medicine glasses to the defendants. There was no dispute about the delivery, but the defendants said they wanted to return the goods. They had not done so. Now they wanted to raise a counter-claim. Invoices were sent to the defendants for the goods, and on the top was printed "all orders accepted contingent upon strikes, delays or any other causes beyond our control." There was a counter-claim for £2 14s. for work done, and of that plaintiffs admitted £1 19s. Mr. Charles H. Moody, a director of the plaintiff company, gave confirmatory evidence. In cross-examination, Mr. Moody admitted that the defendant had ordered medicine tumblers, and that the plaintiffs had accepted the order, but had not delivered the goods. There was no stipulation as to time of delivery. The order for the medicine glasses was given on July 20; from then until November the workers were all on strike. The medicine tumblers came from Belgium. Judge Shewell Cooper asked if the goods were to come from the plaintiffs' own works at Belgium. Mr. Moody replied that the works at Belgium were not their own works. He wrote to the defendants and said they had had a reply from their own works. His Honour: What does that mean? Witness: It is a figure of speech. His Honour: In other words, it is a lie. Witness said de-

fendants were perfectly well aware that the works were not the plaintiffs' own works. His Honour (to Mr. Hollings): Did you know you were going to get foreign goods? Mr. Hollings: They are all practically foreign goods. If Mr. Moody had been frank and said he did not stock them, it would have been different. He said he had them in his stock in his factory. His Honour: The goods sued for have been delivered; why should they not be paid for? There is no defence to this claim. Mr. Hollings: If I had not ordered the medicine tumblers I would not have ordered the others. I have lost £60 or £100 in orders for these medicine glasses. They were 1s. 3d. per doz. They were sold wholesale at 2s. 9d. to 3s. per dozen. They came in 10-gross lots. I ordered 30 gross if I could get them. Judge Shewell Cooper said that, so far as the legal rights of the parties were concerned, it was quite clear that the defendants ought to pay for the goods, which had been ordered and had been delivered. Coming to the medicine tumblers, it was a little difficult to follow, but he could not see that within the law there were damages flowing from their non-delivery, or that the defendants were entitled to damages. In those circumstances judgment would be given for the plaintiffs for £31 18s. 4d., less the sum of £1 19s., which was admitted. He thought it would be well for Mr. Moody to consult his fellow-directors, and see if he could take back the goods, which would reduce the amount of the judgment. In those commercial transactions it was a great pity for the credit of the City of London and elsewhere that persons in business were apt to deviate from the truth as disclosed in the written documents.

Shellac Contract Dispute.—In the King's Bench Division of the High Court, London, on January 17, Mr. Justice Bailhache concluded the hearing of the action brought by Dunlop Brothers & Co., Fenchurch Street, E.C., to recover damages for breach of contract in respect of a parcel of shellac, against E. D. Sassoon & Co., Ltd., St. Helen's Place, E.C. (*C. & D.*, January 19, p. 77). Defendants denied liability. Mr. John Dalton, one of the seven gentlemen appointed by the Shellac Association to arbitrate on the samples of shellac, called for the defence, stated that he and the other arbitrators always considered questions of the 3 per cent. adulteration, and that of the standard with sample. Mr. Rayner Goddard, K.C., for plaintiffs, objected to this evidence, submitting that an arbitrator could not be called either to explain his award or his reasons for coming to his findings. His lordship, however, overruled the objection. Mr. Goddard (cross-examining): Do you mean to tell me that you can take up a sample of shellac and say whether there is more than 3 per cent. of resin and not more than 5?—No. Do you apply your minds as to whether there is more than 3 per cent.?—Certainly. It is left to us to say if the parcel ought to be analysed for the presence of resin. Did you consider the terms of the contract that the sample was not to have more than 3 per cent.?—Yes. Can you tell whether there is 3.5 per cent. or 4 per cent. without analysis?—We cannot tell. Continuing, the witness said that unless there was more than 5 per cent. of resin in a particular sample they paid no attention. Replying to his lordship, Mr. Dalton said that he had been on the panel of arbitrators for some time. It was always their practice to have an analysis when they thought it necessary. Mr. Goddard, for the plaintiffs, submitted that it could not be disputed that in fact the arbitrators did not apply their minds as to whether there was an excess of 3 per cent. mentioned in the contract. There were two distinct matters in the certificate to be dealt with.

JUDGMENT

His lordship, giving judgment, said the contract was contained in a printed form known as the shellac delivery contract. It was dated December 16, 1922, and there were most minute directions as to how these contracts were to be carried out. The way in which they were in fact carried out was that the sellers, when the time came for delivery, sent samples to the brokers of the first seller. In this case there were no under-contracts, it being a direct sale through the defendants.

brokers. When the samples reached the brokers, they communicated with the London Shellac Trade Association. They had a panel of seven brokers, three of whom acted in respect of each contract. Their duty was to inspect the samples, and under the terms of the contract to see whether the sample was up to the standard sample and did not contain more than 3 per cent. of adulterated matter. If the sample contained more than 3 per cent. of such matter, the arbitrators made allowances, and also did so when the sample was not up to the standard sample. If the parcel contained more than 10 per cent. of adulterated matter, it had to be rejected. There was a provision in the contract that if the buyer or the seller was dissatisfied with the award, either could appeal; but it was not a very convenient form, because the appeal had to be lodged within forty-eight hours, and it was obvious there was not much time to give notice of appeal, and especially if it was necessary to have an analysis. There was also a provision for arbitration, but it was confined to disputes not relating to quality. It was to be observed that the form of certificate did not exactly cover the whole ground as to whether the sample was equal to standard sample; and on the question of adulteration, it did not go on to say it contained more than 3 per cent. of adulterated matter, and Mr. Goddard had argued that, because it did not contain that, and afterwards it was found that the sample contained more than 3 per cent., the arbitrators had not complied with the contract. On the other hand, if they had followed the precise wording of the contract, it would, in fact, be binding, as there had been no appeal from it. His lordship said he was satisfied by the evidence that the arbitrators did apply their minds to the two points—whether the sample was equal to the standard sample, and also to its adulteration as being not more than 3 per cent. From the evidence it was also shown that their practice was to have the sample analysed if they thought there was resin in it. When they made out their certificates, they lumped together the allowances that ought to be made, and no allowance was made in this case. It was quite clear that three experienced business gentlemen, if they had suspected that there was 4.6 per cent. of resin in the sample, would have undoubtedly had it analysed. The certificate would therefore stand. The contract in question was made under the special rules of the London Shellac Trade Association, and not under those governing the ordinary London contracts. The action therefore failed. The action was accordingly dismissed with costs.

Gas Company's Right to Manufacture Chemicals

In the Chancery Division, on January 17 and 18, Mr. Justice Astbury heard an important test action brought to determine the right of gas companies to manufacture chemicals. The plaintiff, Mr. John Lindsay Deuchar, secretary of The Castner-Kellner Alkali Co., Ltd., sought against the defendants, the Gas Light & Coke Co., a declaration that the manufacture by the defendant company of any chemical or other substance necessary for the treatment or conversion of any products or residue arising from the making of gas, and the erection of any factory for the purpose of such manufacture, were not authorised by the Company's Act of 1868 or any other Act, and were *ultra vires*. An injunction consequent on such a declaration was also claimed. Mr. Maugham, K.C., Mr. Hunter Gray, K.C., and Mr. Dighton Pollock appeared for plaintiff, and Sir John Simon, K.C., Sir Arthur Colefax, K.C., Mr. Wilfred Greene, K.C., and Mr. Uthwatt for the defendant company.

ARGUMENTS

Mr. Maugham said the plaintiff, who had bought a small quantity of stock in the defendant company for the purpose of raising that issue in the form of an *ultra vires* action, sought to prevent defendants from manufacturing caustic soda, chlorine, or any other chemicals

for the purpose of the treatment or working up of their residuals. It was by that action that the chemical trades of the country were proposing to raise the point that gas companies were not entitled to manufacture substances that they might require for the purpose of their residuals. Defendants, like other companies, produced naphthalene from their tar, and they also converted naphthalene into beta-naphthol, for which purpose they had been in the habit of buying the necessary chemicals, including caustic soda, from The Castner-Kellner Co. Recently, however, they had conceived the notion that they were entitled to lay down an elaborate and expensive plant for the manufacture of caustic soda. This was an important and serious matter for the chemical trades of the country, because it would not be disputed that gas companies, having a monopoly for the supply of gas, were in an exceptional position and could, if they desired, cut the profits on any by-product or chemical such as caustic soda, and they might even be prepared to sell them at a loss. Replying to his lordship, counsel said the action was being brought in the interests of The Castner-Kellner Co. and other companies. He argued that although defendants were entitled to utilise the products of gas-making, they were not entitled to manufacture all the various things they required for that purpose without the authority of a special Act of Parliament. Evidence was given by Mr. Ballantyne, consulting chemist, to the effect that caustic soda was not obtained at any stage in the process of making coal gas.

On January 18 Sir John Simon submitted that defendants had only to prove that they had never attempted to sell any caustic soda. All they were doing was to produce by electrolytic plant caustic soda—and chlorine in a very limited quantity—which was not more than sufficient to treat the naphthalene which was a residual. Evidence that defendants had not sold caustic soda was given by Mr. John Henry Oliver. The capacity of the plant was only sufficient to provide caustic soda as a reagent in converting the naphthalene. Sir John Simon argued that it was fallacious to say that the making of an article required for the conversion of a residual was the carrying on of a different business from that which they were authorised to carry on. If they were entitled to make beta-naphthol, why should they not make caustic soda, just as they might make the retort used in the process? His lordship said he could not see why, if defendants required caustic soda, it should be outside the circumscribed ambit of their constitution to make that article rather than buy it elsewhere. Mr. Hunter Gray said it was inconceivable that so vital a matter as the manufacture of chemical bodies was authorised without there being mention of it in the company's Act of Parliament. The substances defendants were entitled to manufacture were expressly stated.

JUDGMENT

Giving judgment, his lordship said the fact that defendants could make caustic soda at less than one-third the price they could buy it in the market had upset The Castner-Kellner Alkali Co. There was no evidence that defendants proposed to manufacture more caustic soda than was necessary for the process of converting naphthalene into beta-naphthol, nor that they had manufactured more chlorine in the process of making caustic soda than could be used in treating other residuals of gas making. There was also no evidence that they proposed to sell caustic soda. The manufacture of caustic soda by defendants was incidental to the conversion of naphthalene into beta-naphthol, and that was within the limits of the company's Act of Parliament. There was nothing in the Act which limited the method by which the company was to obtain such articles as were entitled in the conversions which were permitted by the statute. Therefore he could not understand why it should be worse for defendants to make caustic soda at £3 a ton than buy it at £9 a ton. He dismissed the action with costs.

STELLITE, an alloy containing cobalt, chromium and 5 to 10 per cent. of tungsten, is suitable for use as cutlery, wood-cutting tools and surgical and dental instruments.—“Journal of the Society of Chemical Industry.”

Dispensing Tested

AT Greenwich Police Court, London, on January 17, Mr. Joseph Ernest Lockyer, chemist and druggist, Evelyn Street, Deptford, S.E., appeared in answer to two adjourned summonses which alleged that he had sold a bottle of medicine which was deficient in potassium iodide (*C. & D.*, December 22, 1923, p. 852). Mr. Roland Oliver was counsel for the Deptford Borough Council, and Mr. H. Glyn-Jones for the defence. In a similar case against Mr. George Waite Wilson, chemist and druggist, Lewisham High Road, the complaint was that the medicine was 9 per cent. deficient in bromide. There were somewhat similar summonses against Leo Atkinson & Co., 294 Brockley Road, and Hay's Drug Stores, 357 New Cross Road. The case against Mr. G. W. Wilson was proceeded with first. The prosecution had been closed, and witnesses were called for the defence.

PUBLIC ANALYST CROSS-EXAMINED

Mr. H. G. Harrison, F.I.C., the council's analyst, was cross-examined. He said the apparatus used for analysis might be more sensitive than that used by a dispenser. There were various degrees of accuracy in such apparatus. He had had no experience of dispensing, but thought an error of as much as 5 per cent. would be large. His own apparatus should yield accurate results. In weighing one cwt. of sugar a few lumps would not matter; it all depended upon the purpose of the analysis or dispensing. Mr. Glyn-Jones said that Mr. Wilson found 224 gr., against Mr. Harrison's 216 gr. Witness said he believed that was the analysis which had been sent to him from Mr. Tickle. He thought, on the combined result, that his and Mr. Tickle's analyses were substantially in agreement. There was a remote possibility of a difference in the three parts into which the sample was divided. Mr. Tickle had given two sets of figures, one giving the strict chemistry and the other giving the maximum allowance under the British Pharmacopœia. These showed a difference of $4\frac{1}{2}$ per cent.—6 per cent. on one and 3 per cent. on the other. He had made ample allowance for this, and more. In the case of Messrs. Atkinson, he found 181 gr. of potassium bromide, and Mr. Tickle found 195 gr., or, on revision, 201 gr. He had made allowance, and taken the most favourable reading; defendant had, no doubt, also taken the most favourable reading. Witness found more of the sodium salt than Mr. Tickle. He thought they had used different methods, and this might account for 10 per cent. difference between them. Mr. Glyn-Jones said he suggested that the analyst tested the sample for the pure dry salt, and Mr. Harrison had told them he had allowed a margin for impurities. If so, the difference between the two analyses became greater. Mr. Glyn-Jones: Is there not a margin of difference between two analyses? Witness: Undoubtedly. In reply to the magistrate, the witness said he had allowed 5 per cent. He always made an allowance in favour of a defendant, and had made one of practically 6 per cent. to cover all the possibilities. He thought this covered more than would be allowed in many analyses. The magistrate said that the proper percentage was most important. Mr. Glyn-Jones said that a little more water being added would not be injurious, and the patient would get the same quantity of the drug, but in a slightly diluted form. Witness replied that the dose would contain less, and there would be a greater number of doses. Re-examined, witness said he had analysed twelve samples, seven of which were substantially accurate. It was more easy to dispense accurately than to analyse accurately. Mr. Oliver said that in Messrs. Wilson's and Atkinson's cases the deficiency was exactly the same, and the two might be regarded together. Mr. Glyn-Jones submitted that the magistrate would not be justified in convicting. There was a deficiency of 9 per cent. alleged, and that did not exceed a reasonable margin. Within certain limits, there might well be some inaccuracy. It was clear that Mr. Harrison was on the look-out for possible errors, and had not allowed the margin prescribed by the

British Pharmacopœia. In a considerable sample, a teaspoonful of water was not worthy of consideration, and the magistrate had to decide what was the reasonable margin. The magistrate replied that the question was whether 9 or 10 per cent. was of such moment as to affect the article supplied. There might be a deficiency of 1 per cent., which he should hold was negligible. He had to draw a line as to what was a reasonable amount of human error to be allowed. He was not prepared to say that nearly 10 per cent. was reasonable. If the article were milk, it would be a very large deficiency, and he should hold that 10 per cent. was a substantial amount. In this case they were dealing with drugs which might have a mighty effect on the human frame, and the medicine might produce no effect or an injurious one. If he decided that 9 per cent. was a reasonable deficiency, its effect upon the whole country might be enormous: 1 or 2 per cent. was an excusable error. He had to draw a line somewhere, and he was not prepared to hold that 10 per cent. was a reasonable deficiency. It seemed a question of how many good men were in Sodom and Gomorrah to save it from being destroyed. (Laughter.) Mr. Glyn-Jones said that, in view of his worship's remarks, he would call witnesses.

EVIDENCE FOR THE DEFENCE

Dr. Philip Hamill, for the defence, said the dispenser was not expected to work with the same degree of accuracy as the analyst, and, from a medical point of view, it was not of importance. In aconite, belladonna and nux vomica, it was laid down that the inaccuracy should not exceed a certain percentage. In opium it was 5 per cent. In his view, a reasonable margin must be allowed. Ordinary routine errors were made, and a marginal error of 5 per cent. would not be complained of by anyone. That would be in addition to any allowance under the British Pharmacopœia. If the analyst found an apparent inaccuracy of 10 per cent., 5 per cent. error in measurement was reasonable. The volume of the mixture supplied should be taken into consideration. The actual quantity to which it was made up did not matter. He once took up two bottles, and found in one 5 per cent. too little liquid and in the other 11 per cent. too much. The size of the bottle—a reputed bottle—might affect the quantity, but the patient would get the proper dose, which would not be affected. The magistrate said he thought he saw his way now. The British Pharmacopœia allowed 5 per cent. for dangerous drugs, and it appeared now that it was not unusual to have a 5 per cent. error in measurement. Dr. Hamill said he understood that the errors he had referred to were stated by Mr. Harrison to have been already allowed for by him. An error of 17 per cent. after allowing for the allowance of the British Pharmacopœia would not be good dispensing. Mr. Oliver: Do you think this is justified for panel patients' prescriptions?—I think they ought to be as accurately dispensed as possible. Mr. Oliver proposed to call a witness to prove the requirements of the British Pharmacopœia, but the magistrate said he was prepared to accept, as he was bound to do, the British Pharmacopœia. Sir Nestor Tirard, senior editor of the British Pharmacopœia, shown a prescription, said the same symbol was used for solids as for liquids, and it was a symbol which should not be used by medical men. In hospital practice it was usual to prescribe in grains. He agreed with the evidence given by Dr. Hamill. Mr. Glyn-Jones said it was true that 480 gr. was the true meaning of the prescription, but there was no satisfactory evidence for the prosecution that there had been any fault on the part of the chemist, or that there had been careless dispensing on the part of the defendants. It would be impossible to dispense any medicine if the rule were strictly applied.

DECISION

The magistrate said that the rule could not be strictly applied, but there must not be a large divergence. It seemed that on the apothecaries' scale the deficiency was 23 per cent., reduced to 17 by Mr. Harrison's reduction of 6 per cent. of errors and foreign substances. What further allowances should be made? If aconite he must allow 5 per cent., but in the case of bromide

there was no fixed standard. Generally, 5 or 6 per cent. was allowed. If he allowed 5 or 6 per cent. to satisfy the demands of the British Pharmacopœia, that still left 11 per cent. A proportion for possible errors in analysis, and a very generous treatment if it were assumed that every single one was in the defendants' favour, still left an unreasonable deficiency. His worship added that he was not called upon to say if the deficiency was to the disadvantage of the consumer; the law said it should not be sold. After making all allowances, he found that there was an error. The costs would be very heavy, and he did not think the case was one which called for a punitive penalty. He did not think there had been a great deal of carelessness. Mr. Wilson and Messrs. Atkinson would be fined 20s. each. As to costs—Mr. Glyn-Jones, interposing, said the prescriptions were not properly written, and Mr. Harrison had not stated in his certificate that the allowance had been made. These should be taken into account in deciding the amount of the costs. Mr. Oliver said the prosecution was undertaken in the interests of poor people. The magistrate ordered payment in the two cases named of £5 5s. each. Mr. Oliver said he would withdraw the summons against Hay's Drug Stores, as no offence could be proved in that case. Mr. Glyn-Jones asked for costs against the Borough Council, and the magistrate allowed £2 2s. His worship remarked that Mr. Lockyer's offence was due to a mistake on the part of an assistant, but Mr. Lockyer was responsible. The summons against him would be dismissed on payment of £2 2s. costs.

Bankruptcy Reports

Re Robert Morrison Lambert, 10 Great St. Helens, London, E.C., drug, chemical and essential-oil merchant.—This debtor attended at the London Bankruptcy Court, on January 19, for his public examination on a statement of his affairs, in which he had returned the liabilities at £10,627, all of which were expected to rank, and disclosed as assets two book debts of the face value of £2,044, but expected to realise nothing (*C. & D.*, II, 1923, p. 268). Examined by the deputy Official Receiver, the debtor said he took over the business which had been carried on by his father at 14 Mincing Lane, E.C., under the style of Samuel Lambert & Co., on the latter's death in 1913. The trading did not prove a success, and in March 1914 he executed a deed of assignment in favour of a trustee. The trustee continued the business, and paid dividends amounting in all to 10s. in the £. In 1916 he obtained his release under the deed and he took over and continued the business. He then possessed very little capital and not much stock, and he continued the business until December 1921, when, owing to losses sustained by the non-fulfilment of contracts, he closed it. The debtor said that he afterwards shared an office with another person, who carried on business as a chemical merchant, and who, under an agreement, provided the money necessary for the transaction of business which he (debtor) introduced. It was agreed that they should each have a half share of the profits; at least, he understood that was the case, but apparently he was mistaken. In December 1922 they ended that arrangement, and he had since acted as managing director of a limited company carrying on business as drug and chemical merchants at a remuneration of £360 per annum. Asked what shareholding he possessed in that company, the debtor replied that he held the shares necessary to qualify as a director; although the company was still in existence, it was not doing anything. It was, however, being kept on. He attributed his insolvency to lack of capital and loss in contracts, to trade depression and consequent depreciation of stock, to heavy advertising charges and to medical expenses. Trading and profit-and-loss accounts and balance sheets were prepared until December 1920. Since 1920 he had incurred a total loss in trading of £3,000, and for several years past he had carried on business on borrowed capital.

The examination was concluded. The creditors include: F. W. Bowyer & Bartleet, £743; C. W. Field, Ltd., £1,800; Freudenthal, Smith & Co., £202; Holland's Distillery (Essential Oils), Ltd., £217; Moore & Hole, £45; Mr. E. J. Parry, £1,105; J. M. Richards & Sons, Ltd., £434; S. H. Travis & Co., £543; J. E. Tibbs, jun., £197; Wyleys, Ltd., £81; Charles Zimmermann & Co. (Chemicals), Ltd., £20.

New Companies and Company News

P.C. means Private Company and R.O. Registered Office

FRANK SEGNER & CO., LTD. (P.C.)—Capital £2,000. Objects: To deal in articles, merchandise and goods connected with the chemical or dyestuffs trades, etc. The directors are:—J. F. A. Segner and D. A. Gates. R.O.: Central Chambers, 40 Brazenose Street, Manchester.

PLATINOTYPE CO., LTD. (P.C.)—Capital £12,000. Objects: To adopt an agreement with J. Willis, to develop and turn to account the business of the Platinotype Co., carried on by him at 66 High Street, Penge, and to carry on the business of manufacturers and sellers of sensitive photographic papers and other photographic materials, etc. The directors are:—C. Robinson and A. W. Clemes.

ERNEST E. MAYER, FAWSITT & CO., LTD. (P.C.)—Capital £45,000. Objects: To adopt an agreement with Ernest E. Mayer & Co., Ltd., and to carry on the business of importers of and dealers in waxes, oils, soaps and chemicals of all kinds, candle and soap manufacturers, chemists, druggists, oil and colour men, etc. The directors are: E. E. Mayer and T. Fawsitt. R.O.: 6 Lloyds Avenue, London, E.C.3.

MEDICAL PRACTITIONERS' UNITED DRUG CO., LTD. (P.C.)—Capital £100. Objects: To carry on the business of pharmaceutical, manufacturing and general chemists and druggists, manufacturers of and dealers in toilet requisites, manufacturers of boxes and cases wholly of card, wood, metal or otherwise, printers, candle-makers, manufacturers of perfumes, collectors of flowers and perfume-producing vegetation, soap manufacturers, drysalters, oil and colour men, etc. R.O.: 41 North John Street, Liverpool.

FINE CHEMICALS, LTD.—The matter of Fine Chemicals, Ltd. (in liquidation) was again mentioned in the Chancery Division, Dublin, on January 22 (*C. & D.*, January 19, p. 78). Mr. Justice Pim granted another week's adjournment.

A. MILLAR & CO., LTD.—The directors' report for the year ended October 31, 1923, states that after making due provision for salaries, wages, repairs, bad debts, etc., directors' fees and corporation profits tax, the net profit, including the balance of £7,441 13s. 7d. brought forward, amounts to £25,813. An interim dividend at the rate of 5 per cent. per annum on the preference, and at the rate of 3 per cent. per annum on the ordinary shares was paid last June, amounting (less tax) to £2,812 10s., leaving a balance of £23,000 19s. 2d. A final dividend on the preference shares at the rate of 5 per cent. less tax—£1,125—was paid in December last. There remains a sum of £21,875 19s. 2d., out of which the directors recommend the payment of a final dividend (less tax) on the ordinary shares, making, with the interim dividend already paid, 8 per cent. for the year, £7,312 10s.; to be placed to credit of benevolent fund, £1,000; to be placed to general reserve, £5,000; to be placed to credit of equalisation of dividends reserve account, £1,500; to be carried forward to next account, £7,063 9s 2d. The directors regret to record the death of Mr. Fitzadam Millar, managing director of the company, which occurred on September 3, 1923. Mr. W. de C. Millar and Mr. H. J. Millar have been appointed managing directors, and Mr. H. J. Millar, chairman of directors. The above report was adopted at the annual meeting held in Dublin on January 17.

Royal Institution of Great Britain

In his memorial lecture on Sir James Dewar, F.R.S., delivered on January 18, Professor H. E. Armstrong, F.R.S., traced this great scientist's academic progress, dwelling particularly on his researches since 1877, the year in which he came to the Royal Institution. The lecturer paid glowing tribute to Dewar's epoch-making work on liquid air and the liquefaction of gases, his researches which led to the utilisation of charcoal as an absorbent, his investigations into inter-molecular forces, and the many other discoveries and observations which formed his contributions to science, in the progress of which he had played so important a rôle. Referring to Dewar's manipulative skill, which was so valuable an asset to him in his experimental work, Professor Armstrong stated that at the age of ten he met with an accident which left him crippled with rheumatism for two years, and he employed this period in making fiddles, regarding this training in manual dexterity as the determining event in his career.

In his second lecture on *Drug Addictions*, held on January 22 (see *C. & D.*, January 19, p. 82), Professor W. E. Dixon, F.R.S., described the use and effects of Indian hemp. Of *Cannabis indica*, the flowering top itself, known in India as ganja, is used for smoking; an aqueous extract and the resin obtained from the plant are also employed. It is an exhilarant, and its effects are comparable with those of tea or coffee, that is to say, it removes fatigue or depression when these are present. Its action of abolishing all control over the emotions is particularly interesting, and when taken by the mouth it blurs entirely all conception of space and time. In India it is a group addiction drug, the addicts sit in a ring and smoke it. Passing on to morphine, the lecturer stated that the ordinary normal individual has no desire to become a drug addict. On the other hand, neurotics under the influence of drugs become almost normal, since their impulses and nervous reactions are decreased. He mentioned that before the war in Cambridge opium used to be dispensed regularly every Saturday evening to farmers of the Fen district, the tradition still being alive that opium had to be taken to ward off malaria, once prevalent in those parts. Dealing with opium smoking, Professor Dixon pointed out that only an infinitesimal amount of morphine reaches the smoker, and proceeded to discuss the treatment of morphinism, and the effects of stoppage. He was particularly severe on heroin, which he declared to possess no advantages over codeine, and stated that it might be excluded without loss to medicine. It was introduced into therapeutics in 1898, but it was not used until 1912 as a drug of addiction in the United States; it is the drug of New York. It induces a habit, according to Pouchet, which is worse than morphinism and more difficult to cure. The lecturer thereupon turned to a consideration of cocaine. Whereas the other alkaloids, and alcohol, act by depressing the central nervous system, and obliterating the impression of fatigue, etc., coca, on the contrary, stimulates this centre and produces a condition of mental exhilaration, and he instanced the remarkable endurance shown by the guides in the Andes as a result of the use of coca. Cocaine, however, acts differently and does not produce this exhilaration. Addicts usually take it as a snuff, and in this form it excites the central nervous system, whipping the nerves into activity. Normal individuals derive no satisfaction from its use. With cocaine the withdrawal symptoms are hardly marked. Dealing with the extent of the drug habit, Professor Dixon stated that in 1918 the annual consumption *per capita* amounted to $\frac{1}{4}$ grain in Austria, 2 grains in Germany and in Great Britain, 3 grains in France, and 36 grains in the United States, where the addicts were estimated to number 175,000, increasing to over 1,000,000 in 1920. In this connection the lecturer declared that the Harrison Law, after being in force for eight years, had been a complete failure in suppress-

sing drug addiction; smuggling was rampant, the dope pedlars were organised; the law had merely altered the distribution and not the supply of these drugs. Our own Dangerous Drugs Act had been in existence for too short a time to pass judgment on its effectiveness. But, he said, care should be taken in passing such drastic laws, which are circumvented by smuggling, and he urged the necessity of international legislation to deal with this evil, instancing the work of the League of Nations, and remarked that at present France possesses the most effective law of this kind. A number of slides were shown of the collection of opium juice, groups of Persian opium smokers, the effects of certain drugs on animals, etc.

Panel Practice Inquiry

THE taking of evidence by the Court of Inquiry on the capitation fee of panel practitioners (*C. & D.*, January 19, p. 80) was concluded on January 21. Sir Thomas Neill, on behalf of the Provisional General Council of approved societies, presented a memorandum and gave evidence. Sir Thomas's council contended that in 1914 grants were voted by Parliament for the provision of specialist consultation in connection with the treatment of insured persons and in aid of the equipment and maintenance of clinics for the use of the panel practitioners. When war broke out the scheme had to be dropped, and although the approved societies had waited patiently since peace was declared for a re-start to be made, all that had emerged, with the exception of the appointment of regional medical officers, the cost of which from April 1922 to December 1923 had been borne by the insured members, had been the periodical demand of the medical profession for more money for the present service. It was hoped that the Court of Inquiry would recommend to the Government the immediate appointment of a Royal Commission, with full power of inquiry into the purposes of the Acts and into the local conditions and practice. It was submitted that it was impossible to regard the increase from 4s. (inclusive of drugs) prior to 1913 to 7s. for medical service under the National Insurance Acts (exclusive of drugs) as being other than "an unconscionable settlement, dictated solely by influences entirely unassociated with any determined value, however loosely computed, of the service rendered to insured persons by the panel doctors." The sum actually allowed for medical benefit in the financial structure of the Act was 6s., and the Government's proposed apportionment of that sum was 4s. to the doctor and 2s. for medicines. To appreciate properly the reasons for giving the doctors a sum representing a minimum advance of 75 per cent. on that figure, the Memorandum described the "unreasonable and uncompromising attitude on the part of the British Medical Association" during the progress of the Bill, and stated that the figure of 7s. was the price necessary to break organised opposition, and had no regard to the real value of the service to be rendered. In the area covered by the London Insurance Committee, comprising nearly one-seventh of the insured persons in the country, the cost of each prescription provided by the Committee was 7.99d. If these figures were applied to private practice, which might reasonably be estimated at 2s. 6d. per visit to the surgery and 3s. 6d. per visit by the doctor to the patient, including the provision of medicines and any necessary certificates, it would be seen that two visits at the surgery and one at the patient's house would represent a payment of 8s. 6d. per annum. Several other witnesses gave evidence of similar purport. The medical representatives and Sir Thomas Neill again addressed the Court; and the chairman, in terminating the proceedings, announced that the award would be made as early as possible.

A STRONG PULL.—At a meeting of East Lancashire traders, held on January 21, it was reported that chemists and druggists were being "pulled out of the place" for factory outfits under the provisions of the Workmen's Compensation Act, 1923.

Retail Pharmacists' Union

Manchester.—A mass meeting of panel chemists was called for January 16 at the Houldsworth Hall, Manchester, when three chief officials of the Retail Pharmacists' Union Executive, Mr. Leo Joseph, J.P. (chairman), Mr. J. E. French (chairman of the Insurance Committee), and Mr. G. A. Mallinson (secretary) were present. Representatives from most of the branches in the North-Western area were present. The chairman was introduced to the meeting by Mr. Scholes (Eccles), chairman of the Manchester and Salford Branch. Mr. Leo Joseph, who acted as chairman of the meeting, said this meeting had been called so that the officials of the R.P.U. might explain the Insurance position in relation to the new contracts with the panel chemists throughout the country. The two years' contracts are ending, and a new contract will have to be made. Severe criticism had been levelled at the R.P.U. Executive by a certain trade journal, because of their apparent inactivity. He wished emphatically to deny that there were any grounds for this adverse criticism, and said it was not even fair criticism, as they were charged with neglecting the interests of the members of the R.P.U. in their apparent dilatoriness in preparing for the new arrangements. The critics knew less than they did, and when the time came he thought they would be able to show that they had been fully alive to the interests and welfare of the panel chemists of the country. The reason the medical service had made their arrangements before them was owing to the fact that the medical service contracts expired three months before theirs (the chemists'). Mr. J. E. French then spoke of the increasing work and responsibilities imposed on panel chemists, and he instanced his own particular area in Kent, where the hours of service had been made longer and more strenuous. He said the present remuneration is inadequate considering the responsibilities and onerous work done by the panel chemists. The service that they gave must be kept at the highest possible standard, and he felt sure if that was done, when they went to the Ministry they would have a good case to secure their rights. Mr. G. A. Mallinson said Lancashire particularly took the Insurance work seriously, and always gave a good and conscientious service. He received fewer complaints from this part of the country than from any other. He impressed upon them that the standard of service was everything, and it was absolutely necessary to give of their best if they were to obtain the proper recognition for their work and receive even better terms in the future. He outlined the various tariffs that had been in operation since the inception of the Insurance Acts and explained the gradual improvements that had taken place. He spoke of the many meetings that had taken place, and of the various ministers of health whom they had interviewed. He eulogised the kindly manner in which Dr. Addison, during his term of office, had dealt with their recommendations, and he would like to say that the chemists never had a more considerate Ministry of Health to deal with. The Executive are determined not to accept any reduction of the present terms of remuneration; they had a strong case for even better terms. Mr. E. H. Simmons, who asked if any better terms could be obtained for the supply of Insulin, was informed that that matter was being dealt with. Mr. J. H. Nidd, an ex-member of the Local Associations Executive and of the R.P.U., said that he would like to give a few words of advice to the younger generation of pharmacists, and to those who were apt to disparage Insurance dispensing. It had often been decried, but he wished to point out that over £30,000 a year was paid out annually in Manchester, and it behoved them to give of their best. The following resolution was then proposed by Mr. A. Hershberg (Manchester) and seconded by Mr. D. H. Evans (Liverpool), and passed unanimously: "That this meeting expresses its confidence in the Executive of the R.P.U. in regard to the forthcoming negotiations with the Ministry of Health, and assures them of their support. A vote of thanks, proposed by Mr. J. Cleworth, was accorded to the chairman (Mr. Leo Joseph) and carried with acclamation.

New Books

Juillet, A., and Roucher, P.—*La Culture du Pyréthre de Dalmatie.* 9½ by 6½ in. Pp. 15. Comité des Plantes Médicinales et à Essences de la Région de Montpellier. [Outlines a scheme for the cultivation of *Chrysanthemum cinerariaefolium* in certain regions in the department of the Eastern Pyrenees, describing the methods of sowing the seeds, care of the plantations and collection of the flowers. The authors state that one hectare yields about 400 kilograms of dried flowers. Reference is made to the use of Pyrethrum soap for the destruction of plant pests. Several illustrations are included of the Spanish plantations at Larbessa.]

Aeby, Dr. Jules.—*Dangerous Goods.* 9½ in. by 6 in. Pp. 320. 30s. Published by the author, 43 Rue de l'Empereur, Antwerp. (Sold by Crosby, Lockwood & Son, 7 Stationer's Hall Court, London, E.C.4.)—[In this book, printed in French, English and German, the author, who is consulting chemist to the Red Star Line, gives information regarding the degree of danger, from the point of view of transport, involved in the carriage of certain chemicals, dealt with under 442 titles, each containing such data in the three languages. An example will suffice to illustrate the method adopted by the author: Amyl nitrite, or iso-amyl nitrite, nitrous amyl ester; liquid, organic compound; its vapours are explosive; best on deck. The value of the work is enhanced by an index embracing the three languages in alphabetical order, containing 4,107 titles.]

Wastell, W. L. F.—*Progressive Photography.* 9 in. by 5 in. Pp. 167. 5s. Houghtons, Ltd., 88-9 High Holborn, London, W.C. [The author, who was President of the Royal Photographic Society in 1922, has written this book for the purpose of guiding the steps of the photographic novice, whose difficulties he is well able to appreciate, having been for many years associated with the "Amateur Photographer" and recently appointed assistant editor of that paper. Many of the points arising in the text are exemplified by illustrations, and a careful study of these plates will be of material benefit to every beginner. Three pages are devoted to "water in photography" and six deal with "hypo," while the remainder of the chemicals "which the beginner is most likely to find useful" occupy three pages.]

Perrot, E.—*Le Thé, Origine, Culture, Préparation, Commerce.* 9½ in. by 6 in. Pp. 48. 6 francs. Office National des Matières Premières Végétales, 44 Rue de Bellechasse, Paris. [This is one of the publications issued by the National Office for Vegetable Raw Materials. After a brief historical note on the origin of tea as a beverage, Professor Perrot deals with the plant, its cultivation and the various manipulations to which the leaves are subjected in China and in other countries where tea is grown. The different varieties of tea and their commercial designations are described, with statistical data of the production—in 1919 the total output aggregated 428,300 tons—and consumption. Mention is made of the use of tea flowers for preparing tea, as practised in Indo-China. There are numerous excellent illustrations showing how the leaves are treated.]

Perrot, E.—*Sur la Production des Plantes Médicinales et des Plantes Aromatiques en Afrique du Nord.* 9½ in. by 6 in. Pp. 8. 2.50 francs. Office National des Matières Premières Végétales, 12 Avenue du Maine, Paris. [A review of the naturally occurring medicinal plants, and the results of the attempts at cultivation of certain drugs, in French North Africa. A large number of extensively used drugs grow in Algeria, Morocco and Tunis, but their collection requires to be placed on an organised basis to ensure a commercial success. The cultivation of a number of medicinal and aromatic plants has been undertaken with promising results, thus Morocco is able to export annually 20,000 tons of linseed. It is interesting to note that Professor Perrot urges that the cultivation of saffron on a large scale should be undertaken throughout Northern Africa.]

Pharmaceutical Botany

XLI. Red Poppy

THE red or field poppy (*Papaver Rhæas*, L., Fig. 136), the weed which colours our cornfields and roadside banks so brilliantly in summer, differs from the opium poppy in having much-divided leaves. This is a character which most of the *Papaveraceæ* share with the buttercup family (*Ranunculaceæ*). The red poppy plant is a branched erect annual, some one to two feet tall. The leaves are pinnately compound, the lower larger ones being often compound (or bipinnate). Some varieties of red poppy have stiff bristles sticking out at right angles to the stem. The large flaming red flowers have a dark, purplish black



FIG. 136.—*PAPAVER RHÆAS*, Linné

"eye," owing to each petal having a black spot at the base (or claw). Petals with a marked eye are preferred for making syrup rheados (see below). The calyx has become reduced to two sepals, which are pushed off (caducous) as the four crumpled petals expand. This method of getting rid of parts no longer of use corresponds to the shedding of bud-scales. The bright scarlet petals are also short-lived, and fall quickly once they begin to fade (fugacious). They are quite separate from one another (polypetalous), articulation to the floral axis being by a narrowed basal portion or claw, Fig. 137. The numerous stamens (Fig. 138, I) below the ovary (hypogynous) fulfil a double function. The gorgeous colouring of the petals attracts bees, but the flower is honeyless, and the abundant pollen satisfies the insect's more material cravings, besides the needs of other red poppy flowers. Note that the calyx, corolla, and stamens are free and hypogynous, cohesion being evident only in the ovary. The ovary itself is quite smooth, being

a miniature in green of the well-known poppy capsule. This globular fruit is crowned by a short style surmounted by ray-like stigmas, usually about ten to fifteen. Corresponding to the latter are internal projections (placentas), which, however, do not meet, so that the ovary is unicellular. The numerous immature seeds (ovules) are borne on the surface of the placenta (a primitive characteristic), and not at the margins only, as is usually the case (Fig. 138 (II)). In the poppy the reduction evident in the calyx and corolla has not extended to the stamens,

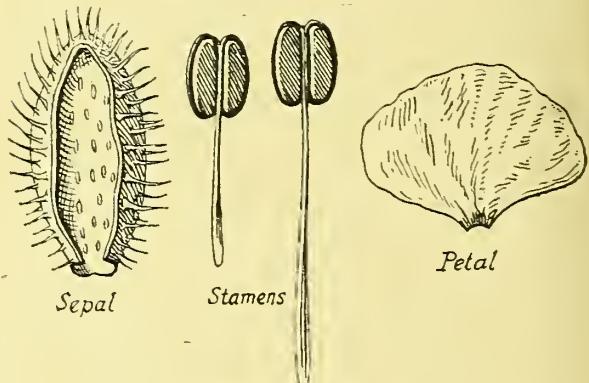


FIG. 137.—SEPARATE PARTS OF RED POPPY FLOWER.

carpels, and seeds. As the floral mechanism is perfected only a single stamen or ovule may be left in higher flowers, as the production of a fertile seed is rendered practically certain. Thus "reduction" may not mean lessened efficiency, but may be in the interests of economy and a higher stage of mechanical perfection.

Red poppy petals are used as a colouring material in pharmacy in the form of syrup rheados. The petals must be perfectly fresh in preparing the liquor (by boiling with water) for this syrup, as otherwise the colouring matter is destroyed, as the petals clot together and become heated by fermentation. The colouring matter of

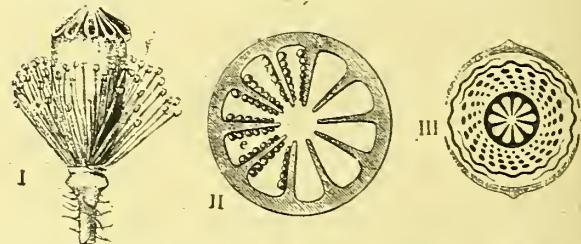


FIG. 138.—I. Ovary with hypogynous stamens. II. Section of ovary showing placenta with ovules distributed over surface. III. Floral diagram of red poppy flower.

the petals is mecocyanin, an anthocyan pigment. Yellow flowers contain flavones, and red flowers seem to be derived from yellow ancestors by carrying the hydroxylation of these colouring materials. Blue flowers are obtained when the process extends further still. In a sense the beautiful colours of red, purple, and blue flowers are degradation products, associated with the inhibition of assimilation and injury to the chloroplasts. Yet Nature turns this decay to decorative purposes to ensure propagation anew.

RESPONSIBILITY FOR PRESENCE OF RATS.—A £5 fine, with costs, was recovered in a London police court, on January 15, for failure to take steps to prevent the defendants' premises from becoming infested with rats.

A "PROHIBITION" STORY.—A Midlands correspondent (9/1) sends us a diverting story of a receipt of a letter from the United States. The letter was observed to bear its stamp pinned on, the inference being that there was no moisture to spare for affixing it in the more usual way.

Recent Patents

Abstracts of specifications of recently-granted patents for inventions. The complete specification (1s. each including postage) of British patents can be obtained from the Patent Office, 25 Southampton Buildings, London, W.C.2, on quoting the name of the patentee and the number of the patent.

Colloidal Sulphur.—A process for preparing solutions of colloidal sulphur consisting in passing sulphur dioxide and an excess of hydrogen sulphide into water containing a protective colloid, at a low temperature. (H. Vogel. 202,613.)

Hydrolysis of Animal Organs.—Animal organs—e.g., glands, lungs, liver—are comminuted and treated at 100° C. for twelve to sixteen hours with hydrochloric acid (sp. gr. 1.19). The liquid is then treated with caustic alkali to reduce the acidity to 1 or 2 per cent., filtered and concentrated *in vacuo* at 33°-35° C., whereupon sufficient caustic alkali is added to render it faintly acid. (R. Haff. 207,573.)

GERMANY

Improved Shaving Soap.—Consists in the addition of hydrogen peroxide, in conjunction with glycerin and spirit of soap, to solid and liquid shaving soaps, in order to facilitate shaving and also as an antiseptic. (F. Wolf. D.R.P. 387,597.)

Hexamethylenetetramine Derivatives.—A process for preparing derivatives of hexamethylenetetramine by causing the latter to react with phenoxyacetic acid, *p*-cresoxyacetic acid, guaiacolglycolic acid, or salicylglycolic acid; the resulting compounds possess antiseptic properties. (Gehe & Co., A.G. D.R.P. 386,691.)

Colloidal Yellow Mercurous Iodide.—Red mercuric iodide is added to a 2 per cent. solution of sodium lysalinate, and the whole shaken for several hours. On standing, unaltered red mercuric iodide precipitates, while the supernatant liquid forms a colloidal solution of yellow mercurous iodide. (Badische Anilin- & Soda-Fabrik. D.R.P. 386,039.)

Magnesium Peroxide.—Magnesium oxide or hydroxide is mixed with solution of hydrogen peroxide and then concentrated at 30° C. under reduced pressure. The magnesium peroxide (25 per cent.) which precipitates is quickly filtered off and dried. (W. Mau and Peroxyd-Werk Erlenwein & Holler G.m.b.H. D.R.P. 386,515.)

Hydroaromatic Ketones.—Saturated or unsaturated hydroaromatic ketones possessing an iso-propyl side chain in the *m*-position are dissolved in a solution of an organic salt, yielding a clear solution of a product displaying on the heart and respiration an action similar to that of camphor; e.g., 3. methyl. 5. isopropyl- Δ -2. cyclohexanone is mixed with a solution of sodium salicylate, sodium benzoate, or potassium isovalerianate. (Farbenfabriken vorm. Fr. Bayer & Co. D.R.P. 386,486.)

Colloidal Granular Silicic Acid.—A process for preparing a soluble granular form of silicic acid for therapeutic use consisting in removing water from a silicic acid gel, drying the residue at 35° C., whereupon the mass is passed through a sieve, mixed with 5 per cent. of glycerin, or with a solution of gum acacia, agar-agar or tragacanth, and menthol, or oil of thyme, is added as a preservative. Other remedial agents, such as potassium glycerophosphate, etc., may be incorporated in the mass. (Chemisch-pharmazeutische Werke Bad Homburg, A.G. D.R.P. 386,760.)

Business Changes

MR. F. R. BURTON, chemist and druggist, has taken over the business of Mr. K. V. Titley, Market Street, Wellington, Shropshire.

MR. W. G. PHILLIPS, chemist and druggist, has purchased the business of Mr. C. T. Bennett, chemist and druggist, 94 Richmond Road, Barnsbury, London, N.1, of which he was formerly manager. Mr. Bennett retains his business at 72 Kimberley Road, Bournemouth.

Westminster Wisdom

By the "C. & D." Parliamentary Representative.

CHANGE OF GOVERNMENT

The new Parliament was opened on January 15 by the King. In the House of Commons an amendment to the address in reply to the King's Speech by the Labour Party resulted in the fall of the Conservative Government on January 21. The King accepted Mr. Baldwin's resignation of the office of Prime Minister, and entrusted Mr. Ramsay MacDonald with the duty of forming a Government. Mr. MacDonald is the Prime Minister of the first Labour Government formed in Great Britain. Among the appointments that have been announced are Mr. Sidney Webb as President of the Board of Trade, Mr. John Wheatley as Minister of Health, Mr. Philip Snowden as Chancellor of the Exchequer, and Mr. Arthur Henderson as Home Secretary. Mr. H. H. Slesser, K.C., who has been appointed Solicitor-General, was junior counsel for the Pharmaceutical Society of Great Britain in the "test case" (*Jenkin v. the Society*) in the Chancery Division of the High Court in 1920.

DYE-MAKERS' AGREEMENT

It was stated in the House of Commons, on January 17, that negotiations are taking place between the British and German dye-makers for the purpose of establishing a working agreement for the sale of the dyes manufactured by each party. The Government has approved of these negotiations on the ground that it would increase the efficiency of the dye-making industry in this country.

WIRELESS LICENCES

It was stated in the House of Commons, on January 17, that the total number of licences for wireless reception issued up to the end of December last was approximately 585,000, of which about 58,000 were experimental licences and 527,000 licences for broadcast reception. Of the latter about 65,000 were due to be renewed before the middle of January, and it cannot yet be stated how many of these have actually been renewed. During the last three months of 1923 approximately 405,000 licences for broadcast reception were issued. The total number of experimental licences remained practically unchanged.

ARMY PHARMACISTS

Dr. Chapple asked the Under-Secretary of State for War, on January 21, whether he intends to publish the report of the Committee set up in October 1920 by the Army Council for the purpose of considering the employment of pharmacists in the Army, and their organisation and status.

Lieut.-Colonel Ashley, who replied, said he was not at present aware of any general desire that this report should be published; but if he is satisfied that this is the general wish of the House, he would take the question into further consideration.

FOOT-AND-MOUTH DISEASE

A number of questions have been asked in the House of Commons regarding the Government policy of slaughtering all animals affected with foot-and-mouth disease. During question time the Minister of Agriculture said it has never been suggested that foot-and-mouth disease cannot be treated by ordinary therapeutic measures so as to result in a large proportion of recoveries in the animals affected, but to put these measures into general practice would maintain the existence of centres of infection, with the result that under the conditions of farming and commerce the disease would become widespread. This, in fact, is what is occurring in Continental countries, where the disease is so general that curative measures alone can be adopted. He added that the cost of this policy to the agricultural community in such countries in losses of stock, loss of milk, and loss of progeny is far greater than the cost of eradication has been in this country. Already £1,230,963 has been paid as compensation, and the total commitments are estimated at £2,418,000.

Chemical Society

At the meeting held on January 17 in Burlington House, Piccadilly, London, W.1, the President, Professor W. P. Wynne, F.R.S., in the chair, four papers were read. In his communication, *A suggested explanation of the allotropic transformations of iron*, Mr. R. H. Atkinson sought to explain the existence of four allotropic forms of iron by gravitational instead of by electronic laws. He discussed the cubic crystal lattices of the different allotropes and the changes in type which occur when iron cools to ordinary air temperature. From these data it was possible to calculate the distance between the centres of adjacent atoms. At a temperature of 1,425° C. the atoms of iron are actually in contact with each other, but they re-group themselves in order not to be pressed out of shape. As cooling proceeds, the distance between the centres falls to a critical value, and as the temperature falls further, there is no escape for the atoms from being pressed. The lattice of the γ form of iron is not stable, and when, on being pressed, it changes into β iron there is an increase in gravitational potential energy; the atoms are deformed, and work has to be done in pressing them out of shape. The movement of isotopes to the surface in the process of cooling is accompanied by loss of heat, and the allotropy of β and α iron is possibly of this type; light isotopes are more likely to be cannoned out by heavy atoms. By partial crystallisation it would be possible to separate heavy and light isotopes, and the author stated that he had succeeded in carrying out a fractional crystallisation of lead, obtaining three fractions, which were found to differ in atomic weight. In connection with work on solutions, Mr. H. J. E. Dobson and Dr. I. Masson undertook a study of the extent to which the water present in hydrochloric acid acts as pure water, a factor they termed the water activity. The experimental method and apparatus employed, as well as the authors' conclusions, were embodied in their paper, *The activity of water in aqueous hydrochloric acid*. The ionic activity is related to the water activity, and the authors expressed the view that the water present in hydrochloric acid is not really water, but is modified in some form, that is to say, that there is some action between HCl and H_2O in solution, the nature of which is, so far, unknown. Dr. E. K. Rideal (with Mr. F. S. Dunn), in his paper, *The vapour pressure of hydrochloric acid*, had approached the same problem from a different angle, based on the theory of electrolytic dissociation of hydrochloric acid. Dr. Rideal discussed the conductivity formula, remarking that for strong electrolytes the constant is not invariable. An activity coefficient might be adduced to solve the difficulty in regard to the law of mass action. The ionic concentration is affected by electrostriction and by solvation, hence a correction is necessary in the law of mass action. The author described, with the aid of slides, the method and the results of determining the partial vapour pressure of hydrochloric acid at various concentrations, and basing himself on his observations, expressed the view that complete dissociation is not present. In his paper, *The freezing of inorganic hydrogels*, Mr. J. R. I. Hepburn described how he had repeated and extended the experiments described by Villiers, who had claimed that by simple freezing, inorganic hydrogels are transformed into crystalline bodies. The precipitation was carried out at 0° C., and the precipitates were frozen for eight hours, either in the mother liquor, or after washing, frozen in pure water. Slides of microphotographs of the results were shown, in which crystalline structures were apparent, which also showed an action to polarised light. However, Mr. Hepburn is of opinion that the products of freezing are crystals only as regards physical properties, and that their formation is due to the pressure exerted by the ice crystals, in which they are included, and remarked in support of this view that the size of the crystals produced by freezing is the same as that of ice crystals. A specimen of frozen cupric hydroxide in suspension, a greenish liquid, was shown, in which precipitation does not take place for a considerable time.

Personalities

MR. E. J. HUNT (Chance & Hunt, Ltd., chemical manufacturers, Oldbury) has been appointed a justice of the peace for Worcestershire.

THE freedom of the borough of Portsmouth was conferred on Alderman F. G. Foster, J.P., chemist and druggist, on January 23 (see *C. & D.*, November 24, 1923, p. 708).

MR. NORMAN FARQUHAR WRIGHT (son of Mr. James Wright, 16 Sandel Street, Calcutta), has passed his final examination at the Institute of Chartered Accountants.

MR. IRVING A. KEENE (The Keene Trading Co., Ltd., London, E.C.) was the winner of Tournament B at the recent London Chess Congress. Mr. Keene's score was 7½ out of a possible 9.

ANTOINE CHIRIS & CO., LTD., 3 Drapers Gardens, London, E.C., have appointed Mr. E. Kershaw as manager. M. W. E. Raffard, who remains a director of the company, is returning to France.

PROFESSOR NIELS BOHR, whose name has been associated with the discovery of a new element (*C. & D.*, I, 1923, p. 125), has been awarded the sum of \$40,000 by the Rockefeller International Education Board.

MR. S. TOLKOWSKY, who is well known in the chemical and drug trades as chairman of the Eastern & Russian Trading Co., Ltd., is now on a business visit to London in connection with important commercial developments concerning the company.

MR. C. B. HARRISON, chemist and druggist, Upper Richmond Road, East Sheen, London, S.W., who occupied the chair at the annual dinner of the Thames Valley District Pharmacists' Association, on January 23, commenced business at East Sheen in 1914, and since then has taken an active interest in pharmaceutical affairs, especially in those of his local association. A native of Douglas, Isle of Man, he was apprenticed to Mr. G. J. Maley, chemist and druggist, of that town, and gained further experience with Mr. J. Price, chemist and druggist, Leamington Spa. Mr. Harrison studied for the qualifying examination at the London College of Pharmacy, gaining a silver medal, and passed the examination in January 1909. He then spent five years with Sanguinetti & Harding, chemists, Ealing, London, W., during which time he studied optics and in 1912 passed the Dioptric examination of the British Optical Association. On the reorganisation of the Thames Valley Association, when a branch of the Pharmaceutical Society was formed, he was elected President.



MR. C. B. HARRISON

"KNOWN, ADMITTED AND APPROVED" REMEDIES.—We receive such a large number of requests for copies of particular formulas that have been published as "known, admitted and approved" remedies under the chemists' exemption in the Medicine Stamp Acts that we have made special arrangements to supply these. Subscribers sending a stamped addressed envelope can be supplied with a copy of any of the formulas for "known, admitted and approved" remedies in "Pharmaceutical Formulas" ("P.F."), *The Chemist and Druggist Diaries*, and "The Pharmaceutical Journal Formulary" ("P.J.F."). The title of the remedy and the reference number must be given. We do not undertake to supply formulas over the telephone.

Births

Notices for insertion in this column must be properly authenticated.

ARMSTRONG.—At "Coolgreany," Alliance Avenue, Cliftonville, Belfast, on January 17, the wife of F. P. Armstrong, M.P.S.I., of a son.

MOULDS.—At Holden House, Oakworth, on January 22, the wife of G. R. Moulds, M.P.S., Hyde Park Pharmacy, Leeds, of a son.

Marriages

COCHRANE-BROWN.—At Mill Square, Catrine, on December 31, 1923, by the Rev. William John, M.A., Thomas Gibson Cochrane, chemist and druggist, Mill Street, Catrine, youngest son of Mr. W. Cochrane, Cummock, to Mary Graham, youngest daughter of Mr. J. Brown, Mill Square, Catrine.

MCLAREN-FRASER.—At the Crown Hotel, Kirkcaldy, on January 16, Robert Kerr McLaren, Meadowhead Farm, Kinross, son of Mr. James B. McLaren, chemist and druggist, Kirkcaldy, to Isabella Dickie Fraser, Kirkcaldy.

Deaths

BRUNT.—At Forest Road, Coalville, Leicester, on January 20, Mr. Francis Brunt, chemist and druggist, aged seventy. Mr. Brunt qualified in 1875, and had been in business in Coalville ever since. He was a prominent Churchman, and took an active interest in the welfare of his town. A widow, two sons and three daughters survive him.

CARR.—At Emsworth, on January 6, Mr. Harry J. Carr, chemist and druggist, aged fifty-six.

CORFIELD.—At his residence, 270 Hagley Road, Edgbaston, on January 15, Mr. Edward Corfield, chemist and

druggist, proprietor of Corfield & Corfield, chemists, 26 Bennett's Hill, Birmingham, aged seventy-two. Mr. Corfield's business, which had a large homeopathic connection, was founded in New Street in 1844 by his uncle, the late Mr. Charles Corfield, and was removed to its present position two years later. Mr. Edward Corfield was a prominent member of the trade in Birmingham, and in 1910 was elected President of the Midland

MR. EDWARD CORFIELD

Pharmaceutical Federation, about which time the accompanying portrait was taken. The funeral took place at the General Cemetery, Key Hill, on January 19.

Fox.—At 35 Addington Street, Ramsgate, on January 11, Mr. Charles James Fox, chemist and druggist, aged seventy-two. Mr. Fox was associated with the same Ramsgate business for fifty-four years, and was in partnership with his father-in-law, the late Mr. Franks, prior to becoming the sole owner. Two years ago he disposed of the business to Mr. J. H. Skitt, chemist and druggist.

HOGG.—At Ulverston, on January 18, Mr. Henry Scott Hogg, chemist and druggist, 13 Queen Street. Mr. Hogg, who was a native of Glenluce, Wigtonshire, served his apprenticeship at Stranraer. He qualified in 1882, and shortly afterwards commenced business in Ulverston in succession to the late Mr. George Taylor. Recognised as an expert in the treatment of cattle ailments, he was well known among local farmers. Mr. Hogg took no part in public affairs, but was one of the oldest members of the local lodge of Freemasons. He leaves a widow, two sons, and two daughters.

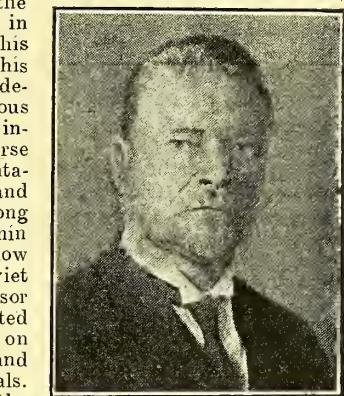
IVANOFF.—The death is announced from Berlin of Professor Dr. Ivan N. Ivanoff, aged forty-four. Professor Ivanoff was the eldest son of the largest landowner in Turkestan, and on his father's death devoted his whole energy to the development of his various enterprises, which included cattle and horse breeding, cotton plantations and mills, and numerous factories, among which was the santonin factory in Tshimkent, now nationalised by the Soviet Government. Professor Ivanoff also contributed numerous articles on chemistry to Russian and foreign scientific journals. He was permitted by the Soviet Government to travel abroad in order to renew old relations, scientific and business, between Russia and foreign countries, and died suddenly from heart failure immediately after addressing a meeting of business men in Berlin on developing commerce between Russia, Germany and Great Britain. His death will be greatly regretted, not only in Turkestan, where his untiring efforts to promote the welfare of the inhabitants and his kindness of heart had gained for him the affection of wide sections of the population, but also by all who have come in contact with him.

KAY.—At 3 Mill Street, Alyth, Perthshire, on January 13, Mr. John Kennedy Kay, eldest and beloved son of Mr. Alexander Thain Kay, M.R.C.V.S., and Mrs. Kay, aged twenty-nine.

LEITH.—At the West London Hospital, W.6, on January 14, Josephine Maud, wife of Mr. M. P. Leith, chemist and druggist, 97 Uxbridge Road, W.12 (branch manager to Mr. G. W. Evans, chemist and druggist, Hammersmith Road), aged twenty-eight. Death resulted from injuries received in a street accident while shopping.

OLIVER.—On January 13, suddenly, Mr. R. Oliver, at one time buyer to John Gosnell & Co., Ltd., soap and perfume manufacturers, 211-215 Blackfriars Road, London, S.E.1. Mr. Oliver, who retired ten years ago, was connected with Messrs. Gosnell for upwards of sixty years.

SMITH.—On January 11, Mr. Sidney Smith, chemist and druggist, Wordsley, Stourbridge, aged sixty-two. Mr. Smith carried on business in Wordsley for thirty-four years.



PROF. J. N. IVANOFF

Wills

MR. WILLIAM JOHN LEONARD.—1 Lindfield Gardens, Hampstead, London, N.W., of Carless, Capel & Leonard, Hope Chemical Works, Hackney Wick, E., who died on September 10, left £389,023 15s. 10d., with net personality £384,815 1s. 9d. A large number of legacies are bequeathed to hospitals and institutions, and of the residue one-third is on trust for each of his brothers, Samuel Henry and Arthur Goolden, and one-third to his cousin, Gilbert Perrin, and the children of his brother, Charles Hare.

MR. EDWARD RICHARD BANNER.—chemist and druggist and dentist, Red Gables, College Road North, Great Crosby, and of Liverpool, who died on November 18, left estate of the gross value of £7,405 15s. 1d., with net personality £7,272 12s. Probate of his will has been granted to his daughter, Mrs. Maud Lizzie Parr Davidson, and his son, Mr. Edward Oscar Banner. The testator left £100 to the Benevolent Fund of the Pharmaceutical Society of Great Britain; and £100 to his assistant and manager, J. J. Cunningham, if still in his service.

Trade Notes

THE TELEPHONE NUMBER of Mr. L. Frankenberg, chemists' sundriesman, 15 Stoney Lane, London, E.1, has been changed to "Avenue 1170."

ENOLIN, LTD., have appointed A. S. Price & Co., Ltd., Blackheath, Birmingham, as wholesale distributors of Enolin tooth-paste for the Midland Counties.

COMFORTINE.—Machons Comfortine, Ltd., Coalville, near Leicester, announce a reduction in the wholesale price of Comfortine, and offer a bonus in return for window show.

TOILET REQUISITES.—In addition to safety razors, combs and shaving-brushes, Standen & Perks, Great Lister Street, Birmingham, offer Maydew brand of shaving sticks and solidified brilliantine.

INSULIN BOOKLET.—The British Drug Houses, Ltd., and Allen & Hanburys, Ltd., have issued the third edition of their booklet describing the uses and methods of administering the "AB" brand of insulin.

"SUPER-MIXER."—Thompson & Co., 48 Watling Street, London, E.C.4, issue leaflets dealing with the advantages of super-mix mills, designed for fine grinding in liquids or intense emulsification of fluids.

CARBONIC ACID GAS.—Those requiring large supplies of carbonic acid gas are advised to communicate with Mr. James Leslie, 85 Mayfield Road, Sanderstead, for particulars of his economical method of preparing pure CO₂ from coke.

CHRYSOID (CHEMISTS), LTD., 1-3 Gower Street, Bootle, Liverpool, advertise in this issue "glycerin, lemon and honey" for coughs and colds. A striking showcard in yellow and black, of which a specimen has reached us, is supplied to those who retail the cough mixture.

ENO'S ADVERTISING OFFER.—J. C. Eno, Ltd., Victoria Embankment, London, E.C.4, referring to the railway strike, remind chemists that their depots in various parts of Great Britain and Ireland hold stocks of cases containing special advertising offers on window-display terms.

SHOP-FITTINGS.—Fredk. Sage & Co., Ltd., 58-62 Gray's Inn Road, London, W.C.1, issue a beautifully printed booklet for chemists, which illustrates and describes some attractive shop-fittings. The booklet will appeal to those who are about to fit up a new shop or to re-model a pharmacy.

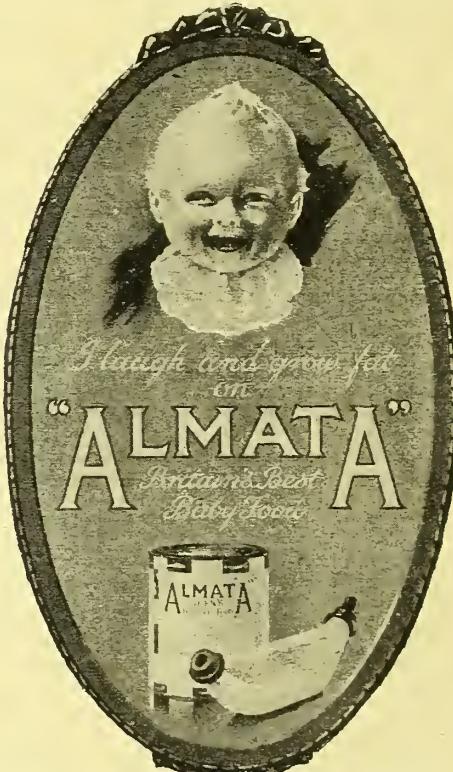
FOOT-AND-MOUTH DISEASE.—The United Alkali Co., Ltd., Liverpool, remind us that the Chloros liquid and sanitary chloride of lime which the company manufacture are the most suitable disinfectants for districts where there have been cases of foot-and-mouth disease. The disinfectants are also used as preventives.

IDOZAN.—Chas. Zimmermann & Co. (Chemicals), Ltd., 9 and 10 St. Mary-at-Hill, London, E.C.3, ask us to call attention to the fact that Idozan (a colloidal form of iron) is now issued in two sizes, retailing at 3s. and 5s. Stocks are held by wholesale houses, but in cases of emergency supplies would be forwarded direct to retailers.

VINOLIA SHAVING STICKS.—Vinolia, Ltd., Lever House, Blackfriars, London, E.C.4, send us specimens of the new form of shaving stick which is being introduced. The special feature, which forms a good "talking point" for the chemist, is that the top of the stick is domed, so that there are no sharp edges to cause possible discomfort to the user.

"BUBBLES."—The latest issue of this publication of A. & F. Pears, Ltd., is described as the "domestic number," the *place de résistance* being 103 photographs depicting some of the staff connected with the home sales department. There is a variety of articles of interest to chemists, among which may be mentioned "Advertising News and Views," by Mr. S. Bernard Smith, and "Pears' Palace of Beauty and Fashion, Wembley, 1924." The illustrations include one of the old Knaresborough pharmacy dating from 1720.

ALMATA FOOD.—We referred a short time ago to the newly-introduced Almata food for children and nursing mothers, put upon the market by Keen, Robinson & Co., Ltd., Carrow Works, Norwich. Since then we have had an opportunity of examining the food and the claims that are made for it. Almata food is of a pale yellow colour and pleasant taste, and the analysis shows that it contains the proper proportion of fats, protein, carbohydrates, and mineral salts to form a complete food for infants, the composition of the ultimate mixture approximating that of mother's milk. An important point is



that the vitamins remain in the food, and we have seen a report of a long series of tests carried out in one of the chief biochemical laboratories in the country, which proves that the vitamins in the food are active. The food is well packed in tins decorated in blue and white, and each tin contains a measure for use in preparing the food. The Almata book is published containing full information as to the employment of the food and useful notes on children's ailments. With a view of introducing the food to medical men the proprietors issue to doctors books of coupons, which are presented to the chemist, who gives a free tin of the food to the customer. The coupons are afterwards redeemed at the retail price. The illustration is a reproduction of the handsome showcard which is supplied to chemists who sell the food.

Information Department

INFORMATION WANTED

L/51.	Boziol (for malaria)	E/171.	Smail Glass Balls for smelling salt bottles
S/191.	Brecknell's Skin Soap	M/81.	Tolysin (London supply)
S/101.	Chaulmoogra Soap	E/81.	Tonking's Linseed Emulsion
S/191.	Emser's Eng. Fish Salt	E/141.	Vermol (for destroying worms on lawns)
S/141.	Gold Theory (for rheumatism)		
E/181.	La Marline Tablets		
S/161.	Mint-Mint Tooth Paste		

INFORMATION SUPPLIED

Binn's Nit combs. H/141	"L'Abeille" castile soap.
Corres' Ondence Courses. M/151	M/151
De Witt's Pills. N/151	Ojentic dental-plate brush.
Divinia perfume. A/141	M/131

Observations and Reflections

By Xrayser II.

"The Westminster Gazette"

has roused the ire of Mr. James C. Philip, of the Imperial College of Science and Technology, by speaking of the "modern chemist" as a salesman of shaving-soap, tooth-brushes and quack medicines. I did not see the offending article, and do not write to defend it. Unless it was meant as a piece of playful irony the very inadequate description of our employment might reasonably be resented by us chemists and druggists, but it is not to this that Mr. Philip objects. Probably he would regard it as accurate enough as applied to us, but to call us "chemists" is to speak loosely, he thinks, and though there may be legal ground for it, there is none in equity. It does not seem to have occurred to Mr. Philip that the science of chemistry has many branches, and he would probably deny the fact that the pharmaceutical branch, if not, as some say it is, the most ancient of these, is a good deal older than most of those which dispute its right to be called chemistry at all. It is not worth while to go over again here the familiar ground for this assertion, but Mr. Philip may be reminded that only last month the President of the Institute of Chemistry declared that there was no science of chemistry, as it is now understood—and, I suppose, Mr. Philip understands it in the current sense—before 1877. Of course, Mr. President was wrong, but the fact remains that chemistry, as these "professional" people understand it, is quite a late comer among the sciences. Is it equitable to take the title "chemist" from those who have borne it for centuries, and had their right to it confirmed by repeated Acts of Parliament, at the bidding of these new claimants? We are quite willing to share it with them if they will consent to share it with us, and I don't suppose the "Westminster Gazette" meant to restrict it to us.

My Note

on the Ridyard advertisement was, as the Editor kindly intimated last week, written before the Retail Pharmacists' Union took any action in the matter. One of similar import had already appeared in these columns, and also in "The Script." As I had some time before been privately informed that the attention of the R.P.U. had been called to Mr. Ridyard's conduct, it is not unreasonable to suppose that the tardy action of that body was due in some measure to these public comments upon it. But what I wish to make plain to Messrs. Hague and Carr is that it is not the disregard of the list by an ordinary member of the R.P.U. that is complained of, but the flouting of it by a member of the Executive that issued it. Mr. Carr's comparison with the action of those chemists who do not feel themselves bound by the C. & D. list is too obviously beside the mark to call for any reply, if, indeed, there were any comparison between a guess-work list and a scientifically prepared list like that issued by the C. & D. Mr. Hague says Mr. Ridyard is not an official of the R.P.U., but this is a mere quibble. Mr. Ridyard is in office, and office carries responsibility.

The Remarks on Broken Bulk

will be read with approval by all panel chemists, and, I hope, a little courage may be infused by them in the more timid of the craft. A glaring case of the kind you speak of, entailing a loss of something like ten shillings on the dispenser (that is presuming the unused portion of the stuff was never required, which is likely), was brought to my notice a few weeks since. Prescriptions involving such a loss as that ought always to be referred back to the prescriber. I do not see why the chemist should be expected to incur such losses even when the prescribed quantity is an ingredient in another preparation; after all, we are in business for the purpose of making a living, and if these losses occurred frequently we should not be able to do it. One has, of course, sometimes to risk present loss in the hope that it may lead to future gain, but this is not

a case in point. A panel patient would not feel himself in any way obliged, and one cannot, as one might in private practice, reckon upon a repeat. The prescribing of stamped proprietaries ought to be discouraged by every means in our power.

No Addition,

says your Liverpool correspondent, was made to the list of nominations to the Council of the Liverpool Chemists' Association. This is not surprising, considering the short notice given of the date of the general meeting, of which a local pharmacist bitterly complains to me. This, however, is no concern of mine, but it prepared me in some measure for the humdrum character of the President's address. They seem to be very much "at ease in Zion." Perhaps they are buoyed up by the belief Mr. Ashcroft expressed that doctors would, as a whole, welcome the separation of prescribing and dispensing. Vain, fruitless hope! To my knowledge it has been cherished by us for the last sixty years, and I see no more signs of its fulfilment now than I did sixty years ago. If these remarks appear pessimistic the fault is not mine: I have been reading the current number of "The Script" and the discussion that followed Mr. Skinner's address at Birmingham, and my reflections must have taken their colour from these. Anyway, the outlook does not seem to me to justify the "come-day, go-day, God-send-Sunday" attitude of some of our local associations (or branches).

Your Advertisements

have improved greatly of late, both in artistry and in general effectiveness, and it has become quite a pleasure to look through the pages devoted to them. The chief feature in this improvement is the greater space now given to a little matter; I have counted thirty-six one-page and fifty-four half-page advertisements in your issue of January 12; not one of them is crowded, but each displays its matter so as to catch the eye at once, and the quarter-page and even the still smaller advertisements evidently aim at and frequently achieve this result. The one double-pager, it need hardly be said, is the most striking of all. It has been said that the secret of great art is to know what to leave out, and John Wesley once apologised for a long letter on the ground that he had not time to write a short one. It takes much more judgment and literary skill to write a short advertisement, "strong without rage without o'erflowing full," than a long one, but once it is written it is much easier to display it artistically, and it goes to its mark with tenfold effect. I need hardly add that the greater the space given to it the greater scope there is for effective display. In one respect only I see no advance in this art, but rather a retrogression—that is, in the names given to new proprietary articles. These are often awkward and sometimes positively ugly, and either too brutally obvious or devoid of significance.

Bartholomæus Anglicus,

otherwise Bartholomew de Glanville, to whose "Liber de proprietatibus rerum" I referred last week, was an English Franciscan monk of the thirteenth century; his book was one of the most famous and widely read works of its kind, and, I believe, the earliest to attain the honour of print, which it did in 1470 or thereabouts. The English translation by Trevisa, by which it is best known in this country, was printed about 1495, and was popular down to the time of Shakespeare's boyhood. It is very rare now, and I know it by report only, but there is, I believe, a copy among the incunabula in the British Museum. In it occurs the famous sentence about a certain animal to the effect that this animal is very wicked and will defend itself if attacked. The section devoted to herbs and trees and their medicinal uses is of most interest to pharmacists. Bartholomew had evidently made a special study of madness, of which he speaks very wisely; he recognises two classes of causes, mental and physical, and, what is strange in a mediæval writer, says nothing of diabolic possession.

Sunlight in Milk

Biologists have shown that sunlight acts as effectively as cod-liver oil in respect to the cure and prevention of Tuberculosis and Rickets, and that it increases the phosphorus and calcium content of the blood.

It has also been shown that milk of perfect composition can be produced only by cows which are properly sunlit and fed on green grass which is itself the product of sunlight.

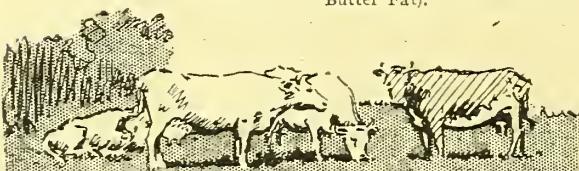
Such milk is brought to this country in the form of Glaxo (Dried Milk) from the sunlit herds and green pastures of New Zealand. Consequently Glaxo is abundant in the Vitamins and Salts which are inevitably deficient in the milk produced by stall-fed herds in grey Northern climes.



The Super-Milk Food

"Builds Bonnie Babies"

Glaxo is manufactured in three strengths: HALF-CREAM (contains 14% Butter Fat), THREE-QUARTER CREAM (contains 20% Butter Fat), and STANDARD (contains 25½% Butter Fat).



ROBINSON'S
of CHESTERFIELD
for CARDBOARD BOXES
ROUND · OVAL · SQUARE · FOLDING



ROBINSON & SONS, LTD. • CHESTERFIELD & LONDON

CHESTNUTS

THE Winter Cough Lozenge.
Munificent Show Material.

ARTHUR H. COX & CO. Ltd.
BRIGHTON.

THE HOUSE OF HOBBS



FINEST ESSENTIAL OILS ENGLISH AND EXOTIC MUSK, CIVET AND AMBERGRIS OTTO OF ROSE "LAVENDER EXQUISIA"

AGENCY AND DEPOT:
CITRUS OILS CO., MESSINA.

"SILES" Brand Lemon, Orange and Bergamot Oils.

BRUNO COURT GRASSE.
Natural Flower Oils and Concretes.

A. MASCHMEYER, Jnr., AMSTERDAM.
ARTIFICIAL PERFUMES.
SYNTHETIC PRODUCTS.

W. H. HOBBS & CO., LTD.
TRINITY PLACE, LONDON, E.C.3.

"PEPSENCEIA"

"PEPSENCEIA" is an ever-ready digestive fluid, containing all the soluble constituents of the gastric juice, preserved in an agreeable aromatic menstruum. It represents both the peptic and milk-curdling ferments obtained directly from the fresh peptic glands.

Supplied in Four Sizes:—
4-oz., 8-oz., 16-oz., and Winchester Quarts.

Originated and Manufactured by—

FAIRCHILD BROTHERS & FOSTER
New York, & 64-65 Holborn Viaduct, London, E.C.1.

Agents for Europe, Asia, Africa and Australasia—

BURROUGHS WELLCOME & CO.
London Sydney Cape Town

ALCOHOL
FOR
PERFUMERY

J. BURROUGH, Ltd., E1 Cale Distillery, LAMBETH, S.E.11

TO REGISTERED CHEMISTS IN BUSINESS

If you are not stocking

G.O. Lemon Skin Tablets

send us a postcard, in return we will post you
3 x 3d. Tablets and Window Show Terms.

The Greenwich Lemonade Co., 11 John Penn Street, LONDON, S.E.13.

The Sale of Cocaine Eye-drops

Quite a number of subscribers have written to us regarding the anomaly of the Home Office granting limited licences to non-pharmaceutical businesses which ostensibly allow them to sell cocaine eye-drops to the public. The Factory Act department of the Home Office issues a list

of suppliers of first-aid cases containing cocaine eye-drops, and many of the names on the list are not chemists, and so far as we know do not carry on their business in accordance with Section 3 (4) of the Poisons and Pharmacy Act, 1908. It seems to have been taken for granted that the Home Office licence under the Dangerous Drugs Acts over-rides the Pharmacy Acts, but, as we emphasised last week, this is not so. The sale of first-aid cases to factories is a retail transaction under the Pharmacy Acts, and cocaine eye-drops is a poison within the meaning of Part I of the Poisons Schedule. Many of the suppliers of surgical dressings who are selling these sets were unaware of the restrictions imposed by the Pharmacy Acts, and we consider that the Home Office should have warned them that although licences under the Dangerous Drugs Act had been granted and paid for the licences were useless. It looks otherwise as though the Home Office were, through the sin of omission, leading business houses to break the laws dealing with the sale of poisons. We find that the Pharmaceutical Society has become aware of this, and has issued the following warning :—

The Society has recently made purchases from persons, not entitled under the Pharmacy Act to keep open shop for the retailing of poisons, of eye-drops containing cocaine and perchloride of mercury (both scheduled poisons), and it is clear that some misunderstanding has arisen in connection with the matter.

I am, therefore, writing to call the attention of firms said to be supplying the prescribed equipment for first-aid boxes or cupboards under Section 29 of the Workmen's Compensation Act, 1923, to the provisions of the Pharmacy Acts, which apply to the sale of these eye-drops. Licences or authorisations under the Dangerous Drugs Act Regulations do not exempt those so licensed or authorised from the provisions of the Pharmacy Acts, and it is an offence against those Acts for persons or firms other than those entitled to keep open shop for the sale of poisons to retail, either separately or in the box or cupboard, the eye-drops in question.

The sections to which your attention is specially drawn are Sections XV and XVII of the Pharmacy Act, 1868, and the Schedule to the Poisons and Pharmacy Act, 1908. The eye-drops are a preparation included in Part I of the Schedule.

The receipt of this circular letter must not be taken by the recipient as a suggestion that illegal sales by the person or firm to whom it is sent have been brought to the attention of the Society, but it is being issued in view of the fact that misunderstanding appears to be somewhat widespread and renders a general warning advisable.

We understand also that the Factory Act department of the Home Office is issuing a revised edition of Form 923 in which attention is to be called to the fact that the cocaine eye-drops can only be supplied by registered chemists. We hope that chemists will realise that this is an opportunity for showing the public that the qualification prevents the careless handling of poisons and protects the public from poisoning.

Oilseeds and Oils in 1923

In our issue of October 6 last (p. 483) we drew attention to the remarkable growth of our import trade in oilseeds, oils, etc., and, commenting on the marked strength of linseed and its oil, we suggested that the continuation of stringent conditions would prevail over the balance of the year. Since then, notwithstanding the surprise aroused in regard to the phenomenally heavy revised official forecast of the new Argentine linseed crop amounting to as much as 1,900,000 tons, the tendency of prices, although occasionally easier in regard to forward shipments, has displayed wonderful resistance to the bearish feeling arising from the huge crop coming into sight. This is due chiefly to the scarcity of spot

and near at hand seed, and also the potential American demand for the new seed. In the course of this month very considerable quantities will be cleared from the River Plate, but the advent of the "record" crop movement looked for has lately failed to exert any material influence on the market, which in fact has been even firmer in all positions. It is now estimated that the visible supply of linseed is 35,000 tons greater than it was this time last year, but heavy arrivals on the Argentine seaboard have been easily absorbed for shipment to Europe and the United States. Crushers generally have shown more interest, having been short of seed for some time past, and they are now anxious to provide for part of their early requirements. Our receipts of seed over the latter part of the past year were proportionately much lighter than for the first nine months of the year, as the River Plate season's resources became rapidly depleted by the exceedingly heavy quantities that were drawn by the United States. A fortunate feature during 1923 was that the quantities imported from India were so much increased as to exceed the receipts from Argentina, as will be seen from the official returns of the various descriptions of seed given below. These returns, it will be seen, show in all cases an increase compared with the previous year. This would, therefore, testify to the increased amount of business handled by the home industry. The details are very interesting, and show the comparisons for the two previous years :—

Imports	1921	1922	1923
Linseed :—	Tons	Tons	Tons
From Russia	1,172	422	1,914
,, United States	—	—	—
,, Argentina	401,973	178,995	169,967
,, British East Indies	41,941	158,231	190,464
,, Canada	602	327	—
,, Other Countries	24,100	20,874	19,159
Total	469,793	358,849	381,504
Cottonseed :—			
From Egypt	244,567	282,818	338,376
,, British India	51,936	136,928	151,538
,, Other Countries	80,015	64,177	53,651
Total	376,518	483,923	543,565
Rapeseed	28,077	33,410	60,898
Soya-beans	61,425	59,357	113,062
Nuts and kernels for oil pressing	394,726	365,085	455,368

It will be seen that the increase on the year under linseed, with a total of about 381,500 tons, is not very large, but in the case of cottonseed the much heavier tonnages accounted for from Egypt at over 338,000 tons are chiefly responsible for the abnormally large total receipts from all sources of over 543,000 tons, which denotes a marked excess against the two previous years, especially 1921. There was also an increase in the arrivals of rapeseed, while supplies of either soya beans or nuts and kernels by far overlapped the previous returns given. Within the last three years there has been, indeed, a very remarkable expansion of activity in nuts and kernels for oil pressing, which is a satisfactory and encouraging feature. As regards the main descriptions of seed oils our exports within the last three years have shown irregularity, the returns of linseed oil, although very satisfactory, having shrunk considerably during last year, whereas there has been a very considerable increase in the exports of home-made cotton oil, chiefly to Holland, Belgium and Germany. On the import side supplies have been again somewhat on the increase, the main feature being the foreign

competition of soya-bean oil, although home crushers in this direction have held their own, as apparent from the fact that good quantities of the home-made product have been taken for abroad, apart from the material increase in the home outlet. We give below figures showing the movement of supplies with comparisons:—

—	1921	1922	1923
Imports:—	Tons	Tons	Tons
Cotton oil, unrefined ..	2,655	1,576	3,327
Linseed oil ..	87	4,054	4,118
Soya-bean oil ..	16,473	20,357	23,606
Exports:—			
Cotton oil ..	2,111	1,391	9,731
Linseed oil ..	55,252	59,388	37,701
Soya-bean oil ..	9,887	8,097	7,549

The most striking feature in the export figures is the set-back of about 21,500 tons in linseed oil, chiefly due to the falling off in the American demand, which was very active over last spring, but the home outlet last year was considerably better for seed oils generally, although the demand for soapmakers' grade of refined cotton oil proved disappointing, due to the relative cheapness of other classes of oil, including tallow. The price of Egyptian crude cotton oil on the spot has lately been practically on a level with that for linseed oil, having reached £43 10s., the shortage of American cotton-seed having been an important factor. In the past year linseed oil on the spot fluctuated from £39 to £53 and closed at £43.

Insurance Dispensing Terms

XIV. Appliances

At the beginning of 1923, the Ministry of Health issued to all Insurance doctors and pharmacists a memorandum dealing with the supply of scheduled appliances. Certain modifications in the method of supply and the quality to be supplied were embodied in this memorandum. The object was to set up standards of quality for the dressings available for insured persons, these being the standards adopted in the new British Pharmaceutical Codex, 1923. The Retail Pharmacists' Union and the Insurance Acts Committee of the British Medical Association agreed with the Ministry of Health in adopting these standards, and they now form an integral part of the drug tariff. Briefly, all lint, wool, gauze, and gauze tissue must now be supplied in sealed packets, and all bandages must be completely wrapped. Two packages of standard dressings have been introduced, and these and all gauze must be supplied in a sterile condition. Certain sizes of sealed packets have been included in the tariff, and Insurance chemists are expected to keep these in stock. Practitioners have been notified of these selected sizes, and have been asked where possible to specify these when ordering dressings. We understand, however, that they do not seem to restrict themselves to these sizes now any more than they did before the adoption of special standards. Rules were included in the tariff for the guidance of chemists in dealing with orders for intermediate sizes; but these, again, have introduced various anomalies and add to the chemist's uncertainty as to what he actually gets paid for. The first note is as follows:—

Where the quantity ordered is less than the largest size or weight included in the tariff and is not the mean of two consecutive tariff sizes or weights, the nearest tariff size or weight should be supplied.

This obviously means that, if the practitioner orders a size of gauze or a weight of lint or wool which is

smaller than the largest size mentioned in the tariff and is not half-way between two sizes mentioned in the tariff, the chemist must give the nearest tariff size, whether it is up or down. For instance, in boric lint the tariff sizes are 1, 2, 4, 8 and 16 oz. If 5 oz. is ordered, the chemist must supply 4 oz.; if 7 oz. is ordered, he must supply 8 oz. Note 2 states that:—

Where the quantity ordered is the mean of two consecutive tariff sizes or weights, the next larger tariff size or weight should be supplied.

If, therefore, the prescriber orders a size which is just half-way between two tariff sizes, the chemist must supply the size larger than that ordered. For example, if 3 oz. of boric lint is ordered, the chemist is directed to supply 4 oz. In spite, therefore, of the fact that the practitioner is told that he may order whatever he thinks necessary for his patient within the provisions of the Insurance Act, the tariff makes it impossible for him to secure for his patient by means of one prescription quantities such as 3, 5, 6 or 7 oz. of plain lint, boric lint or cotton-wool. In effect the tariff, by means of a sort of "doubles or quits" arrangement, provides that a patient cannot have more than 2 oz. unless he takes 4 oz. He cannot have 6 oz., but if he is not content with 4 oz. he must take 8 oz. We believe that hopes were entertained that economy might result from the introduction of this sealed packet system, but it is a rather complicated scheme of economy which provides that if you require more than 2 oz. of lint you may order 3 oz., and you will then get 4 oz. Moreover, an anomaly arises in the case of sal alambroth lint, the largest tariff size of which is 4 oz.; for while, as we have shown, the chemist cannot supply 5, 6 or 7 oz. of boric or plain lint, the doctor may order 5, 6 or 7 oz. of alembroth lint and the patient will get it. This is due to the fact that Note 3 provides as follows:—

Where the quantity ordered is greater than the largest size or weight included in the tariff, a number of packets corresponding as nearly as may be in quantity to the quantity of appliance ordered should be supplied.

According to this, if the quantity ordered is not mentioned in the tariff, and is larger than any quantity which is mentioned in the tariff, the chemist is expected to make up the quantity ordered with the most convenient tariff sizes. For example, the largest tariff size of cyanide, or indeed any medicated gauze, is half a square yard; so, if 6 square yards is ordered, twelve tariff packets are to be supplied to the patient. According to the tariff rule, the chemist would not be acting correctly in supplying one 6-yd. packet. Another anomaly arises because 4 oz. of boric wool is the largest size in the tariff. Consequently, if 5 oz. of boric wool is ordered, the patient should receive one 4-oz. and one 1-oz. packet; but if 5 oz. of plain wool is ordered, the patient would only receive 4 oz. Some of the sizes we have mentioned may not be frequently prescribed, but prescriptions for 3 oz. are often met with, and 6-oz. quantities are not uncommon. Many chemists probably know of patients who have been having 3 oz. of lint and some ointment every week for years: while they always had 3 oz. formerly, now they get 4 oz. according to tariff rules. We believe there is some system in practice whereby a routine examination is made of the prescriptions issued by different practitioners with the object of checking extravagance in prescribing. It cannot encourage practitioners in their practice of economy to know that every time 3 oz. of lint is ordered the Ministry of Health insists on adding another ounce by way of bonus, inflating the claims

on the drug fund to that extent. Pricing offices, in their interpretation of prescriptions, seem to stick as much as possible to the letter of the practitioner's order, and only allow to the chemist the price of the quantity of the drug or article actually specified by the doctor. Possibly this action is influenced by this method of investigation of extravagance. In the case of these sealed packets of dressings, however, the chemist for once is definitely told to supply a larger quantity than the prescription specifies, and is as definitely promised payment for it. In order to simplify the position, we suggest that boric and sal alembroth wools and sal alembroth lint, each in packets of 8 and 16 oz., should be added to the tariff, and that medicated gauzes should be made available in sterile packages of one and three yards. This would place these appliances in the same position as the unmedicated lint, wool and gauze, and would therefore remove the anomalies which at present exist. If, further, chemists were directed to supply the quantity ordered by the doctor whatever it may be, by making up the quantities not specified in the tariff, when they are prescribed, with the nearest and most convenient tariff sizes, much of the confusion which the present arrangements give rise to would be avoided. The various modifications which have taken place in the dispensing-fee scale during the years subsequent to 1916 have left the figure for appliances at 2d. for the years 1922-23. One might therefore assume from this that this figure of 2d. is the allowance for establishment charges which is included in all other dispensing fees; but this is by no means certain, owing to the very involved nature of the various changes which have taken place in the scale. If we go back to the commercial tariff compiled in 1915 by the Departmental Committee, we find that, of all the articles or medicaments enumerated in the scale of dispensing fees, appliances were the only items which were not given a professional fee. The only amount which was paid for these prescriptions over and above the actual cost of the ingredients was the establishment allowance of 0.8d. Whatever the cost of the material supplied, all the chemist received was 0.8d., and even this was not all profit—far from it. In order that chemists may gain some idea of what is actually comprised in what is known as the allowance for establishment charges, as well as the manner in which all the items of the chemist's remuneration have been calculated, we print on p. 133 a summary of some of the evidence on this point given before the Departmental Committee. From this it is clear that in the opinion of the Departmental Committee the chemist, in supplying insured persons with any of the appliances in the tariff, was merely acting as a middleman; and therefore all he was entitled to be paid in return for this service was the actual cost of the material *plus* an allowance for rent, rates, taxes, lighting, heating, cleaning, the errand boy's wages, interest on capital (and all the foregoing are actual out-of-pocket expenses), earnings of management and a return for his services as a salesman (and the two latter items are all that can be construed as profit to the chemist). Let it be remembered that the sum of 0.8d. represents all that when added to a prescription, and then endeavour to assess the value of the amount allowed as a return for salesmanship. It really comes to this—that, while the chemist has returned to him in one form or another all that it has cost him to procure and supply to the patient any particular appliance which may be prescribed, he receives practically nothing

as wages for the work he does or as any personal recompense for the service he has performed. We cannot agree that this arrangement has ever been a fair one. It is by no means a commercial proposition. Under the 1915 tariff no fee was allowed for appliances, but then a percentage profit was added to the cost of all materials. Under the 1916 tariff, however, only the bare cost of materials was allowed, and therefore an adequate amount should have been added to the prescription in the form of personal remuneration for the chemist. As a basis for discussion we suggest that the dispensing fee for appliances in the present tariff should be 3d. instead of 2d. The chemist is expected to keep all tariff appliances in stock, and the cost of many of these is high. On the capital thus invested he gets no return as interest. Rubber and elastic web bandages are perishable articles, and there is risk of loss on these. Special bandages, such as perforated rubber or 4-in. flannel bandages, not being on the tariff, must be procured specially, and there is no way in which the chemist can recover any out-of-pocket expenses which he may thus incur. When the goods are supplied, the chemist must give at least one month's credit. Leg bandages, such as indiarubber, elastic web and crêpe, are frequently prescribed two at a time, and an order for four crêpe bandages is sometimes met with. Yet these orders constitute only one prescription, and therefore are allowed only one dispensing fee to cover establishment expenses. When it is remembered that the ingredient prices of such prescriptions vary from 30d. to 100d. or more, it will be realised that the present allowance of 2d. is inadequate. Surely no other trader would contract to supply goods under these conditions. In 1923 two packets of standard dressings were introduced into the tariff. Prior to 1923, if the appliances which are contained in these packets of standard dressings had been ordered on one form, the chemist would have received three separate dispensing fees in one case and four fees in the other case. Now, however, one fee only is paid in respect of each packet. We are informed that these standard dressings are being ordered with increasing frequency. This is one direction in which the remuneration which the Departmental Committee decided the chemist should receive has been cut down by subsequent arrangements. The addition of an extra penny to the present fee payable in the case of appliances would be no more than is reasonable and just to recoup the chemist for his various expenses in stocking all the appliances in the tariff, and to afford him some personal remuneration for the services he performs in supplying them to insured persons.

We commenced this series of articles in our issue of October 20, 1923, and have now dealt with the five chief factors affecting the chemists' remuneration for dispensing Insurance prescriptions. Next week we hope to put forward suggestions towards a revised scale of dispensing fees embodying the various criticisms we have made. There is still another factor which affects the payments made to chemists—the deduction made from every account for the expenses of the Pharmaceutical Committee. At present this deduction is calculated as a percentage on the gross value of the account. We hope to show that this basis is quite an unfair one, owing to the large number of prescriptions which are now issued for expensive proprietaries; and we intend to suggest that the deduction should be made in the form of a percentage on the net value of dispensing fees. We shall also deal with one or two other matters in concluding this series of articles. Time is passing: only three months is left before the present terms expire. Six weeks' notice must be given to Insurance chemists in the event of any change; and a change in many details, if not in vital principles, is imperative. Is there to be a hurried compromise at the eleventh hour again?

Colour Reactions

Vegetable Extractives with Sulphuric Acid

By Alan H. Ware, Ph.C.

A RECENT abstract on loganin (CHEMIST & DRUGGIST II, 1923, 305) referred incidentally to the purple colour-reaction given by this glucoside with dilute sulphuric acid. A few years ago the writer found this reaction was readily yielded by the B.P. tincture and by the liquid extract of *nux vomica*, if either were evaporated with dilute sulphuric acid. This led to an investigation of other drugs by the same method. Up to the present about 120 have been so tested, and over 90 gave *definite* colour-reactions. As a general rule the best results, and often the only characteristic reactions, are given by the following process :—

4 to 5 c.c. of the extractive, diluted if necessary, are placed in a large dish, with a few drops of dilute sulphuric acid, and evaporated over a small naked flame or on a water-bath. In either case the dish must be occasionally rocked from side to side, so that a film dries above the evaporating liquid. This film exhibits the characteristic colour, if any. Phlobaphenes, separating in an early stage, should be filtered off.

It is well to try also the following methods for resinous and a few other extractives :—

A little of the drug extractive is evaporated so as to leave a residue as a thin film upon the dish. The dish and its contents are then cooled and a few drops of strong sulphuric acid added. This process gives a cleaner colour-reaction with some resinous galenicals.

In one case (aconite) a positive result was yielded by the modified method, when the general method gave a negative reaction. Some resinous galenicals, and a few others, yield still more characteristic results if the strong acid be previously well mixed with about 10 per cent. of nitric acid. The test will be found of practical value in the identification of both galenicals and powdered vegetable drugs. Satisfactory extractives of powdered drugs can usually be made by shaking the powder with the menstruum in a test tube, and warming for 10 to 15 minutes in a water-bath. The following menstrua should be tried, viz., water, 45 per cent. alcohol, and, if possible, absolute alcohol. In default of the last named methylated spirit may be used. It will sometimes be found advantageous to extract the drug, or shake out the galenical (freed from alcohol), with ether or chloroform, evaporate the solvent and take up with alcohol before applying the test. In addition to colours varying from rose through purple to violet, other colours, notably yellow, may be produced. It is surprising that these reactions, which are so easily obtained, yielding such distinctive results, appear to be so little known. Very few of them are recorded in textbooks and works of reference. Take the case of tincture of *strophanthus*, which yields a characteristic green succeeded by a good purple. This reaction of strophantin is known like the equally characteristic reaction of Logainin, and yet there appears to be no record that they may be obtained so easily with the B.P. galenicals without any special preparation. The results may be classified roughly, for practical purposes, as follows : *A*. Drugs yielding good colours varying from rose through purple to violet, or often changing from one colour to the other in the order given. *B*. Drugs yielding very definite yellows, most frequently lemon-yellow. *C*. Drugs yielding both yellow and purple; the yellow most frequently, but not always, preceding the purple. *D*. Drugs yielding other good colours or associations of colours. *E*. Drugs yielding dull or slight purples or yellows, or colours of little distinctive value for practical purposes, such as browns indistinguishable from the results of caramelisation, etc. The subjoined lists include most of the cases of special interest in relation to the identification of powdered vegetable drugs or their galenicals. Some of the drugs which have not been found to yield good results may do so on further investigation with other solvents, etc.

CLASS A.—GIVING PURPLES AND RELATED COLOURS

Acacia bark, Chromogen is more soluble in water than B.P. (decoction) in alcohol and is precipitated by neutral lead acetate. Splendid purple.

Aconite root in tr. or lin.	Aconite can be distinguished from belladonna and pyrethrums galenicals by the second method described. The colour-reaction may be due to a phytosterol.
Asafetida in tr.	Good purple, due perhaps both to the resinotannol and the ferulic acid.
Bael fruit in liquid extract	Magnificent purple. The chromogen is soluble both in water and in alcohol. It is not completely precipitated by neutral lead acetate, but is precipitated by the basic acetate. Reaction is not due to a tannin or gallic acid, since no reactions for these bodies are yielded, but there are indications of the presence of a glucoside which may be more allied to an anthocyanin than a flavone, and hence yield a purple instead of a yellow with sulphuric acid.
Benzoin in tr.	Rich purple, passing to a violet, by general method. Less rich but more distinctive result obtained by the strong acid method in the cold. Using strong sulphuric acid containing 10 per cent. of nitric acid a maroon-red, passing to yellow ochre or orange, is obtained. Colour-reaction is probably due to labdanum cinnamate.
Cascarilla in tr. (less with inf.)	Fairly good purple due to two chromogens, one of which is insoluble in either water or chloroform, and appears to be one of the resins (mostly soluble in chloroform). The other is soluble in water and not precipitable by either neutral or basic lead acetate.
Cimicifuga, tr.	Good purple. Contains at least two chromogens resembling those of cascara with respect to properties above given, except that the water-soluble chromogen appears to be partly precipitable by basic lead acetate.
Cubebs, tr.	The chromogens are particularly cubebin and cubebic acid. A purple is yielded by the general process (with greenish oily drops). A more distinctive result is yielded if to a cooled film, obtained by evaporating the tincture, a few drops of strong sulphuric acid containing 10 per cent. of nitric acid be added. This gives a rich red followed by a very characteristic plum.
Curcuma, tr.	Good range of red, purple and violet.
Ergot, tr. ammon.	A rose-purple. A poor colour is yielded by the liquid extract, so that the chromogen is not very water-soluble.
Galbanum, tr.	Good range of violet, purple and brown. Probably due mainly to the resinotannol and the umbelliferone.
Guaiacum, in simple tr. and mist.	Rich purple. Apparently due to certain bodies which give blue and red, respectively, in the resin.
Hydrastis, tr. or ext.	Poor result by general method but a good violet, becoming purple if treated by method given under cubebs. This is due to the hydrastine and berberine and is one of the few instances where the chromogen is an alkaloid. Tinct. berberidis gives a similar reaction, due to berberin.
Nux vomica in tr. and ext.	Rich purple, due to loganin. This glucoside, soluble in water and alcohol, is precipitated neither by neutral nor basic lead acetate. The view that there is a close relationship botanically between the gentianaceæ, apocynaceæ and loganiaceæ is strengthened by the fact that the investigator has proved that many plants of these families—ignatia, gelsemium, quebracho and alstonia—contain a chromogen resembling loganin with respect to above properties.
Rhubarb, inf.	Good rose-purple. The chromogen is not the resinous active principle, since it is easily water-soluble and cannot be shaken out with chloroform, etc., probably gallic acid or gluco-gallin.

- Sumbul, tr.** General process gives a good reaction, but better are given as follows: Evaporate to obtain thin film and cool. With this, conc. sulphuric acid gives a red, becoming purple on standing. If the conc. acid contains 10 per cent. of strong nitric acid a purplish-crimson is given. If the tincture be diluted with water, shaken out with chloroform, and the chloroform layer be evaporated to dryness, the residue dissolved in methylated spirit and treated by the general process, gives a purplish-violet, becoming blue-violet on standing. Chromogen is a resin.
- Valerianæ, tr.** This contains a chromogen which appears to resemble one of those of cimicifuga (cf. cascara also) in being a body insoluble either in water or chloroform. The tincture gives a beautiful purple to the test.
- CLASS B.—GIVING GOOD YELLOW COLOURS**
- These are usually due to flavone derivatives allied to quercitrin (or its hydrolysis product quercetin). They exist in the plant as glucosides, soluble in water, with some exceptions. They are, however, usually more soluble in alcohol and are all precipitated by acetates of lead.
- Caryophylli, inf.
Jaborandi, tr.
Hamamel, ext.
Picrorrhiza, tr.
Podophylli, tr.
Rosæ, inf. acid.
- All yield a yellow with little or no purple. The colour is generally a fine lemon-yellow. An absolute alcohol tincture of rose petals is colourless. This is supposed to be due to the production of an isomer of the anthocyanin, which is probably a flavone. On adding dilute sulphuric acid, the red acid-anthocyanin is produced. On evaporation this colour again disappears, being replaced by the yellow, due either to the above mentioned or another flavone (Rutin).
- Catechu (pale) in a tr. made with absolute alcohol Gives a fine lemon-yellow, followed by a rich mahogany brown. Black catechu gives the latter colour but no definite yellow. Yellow is due to quercetin.
- Glycyrrhiza, in diluted liquid extract or absolute alcohol tr. or a dilute solution of glycyrrhizin All give a very characteristic yellow ochre to orange-yellow. The cleanest and best colour-reaction, however, is given by an absolute alcohol tincture, or by its equivalent, a solution obtained by precipitating the liquid extract with a large excess of absolute alcohol. These contain very little glycyrrhizin, and the colour-reaction they give is mainly due to a flavone body contained in the root. It may be that the somewhat similar reaction yielded by commercial glycyrrhizin is due to the latter being imperfectly freed from the flavone. The commercial article, however, gives practically no flavone reaction with ferric salts, although its reactions with ammonia and lead acetate resemble those of flavones fairly closely. Possibly glycyrrhizic acid is allied both to the flavones and the saponins.
- CLASS C.—DRUGS GIVING BOTH YELLOW AND PURPLE**
- Senega, in tr., and to a less extent, inf. also Gives a fine lemon-yellow followed by a rich purple. Contains two glucosidal saponins, polygallic acid and senegin, each of which give the purple colour. The first-named of these chromogens is precipitated by neutral lead acetate with the flavone giving the yellow. The senegin is soluble in water, not precipitated by the neutral acetate but by the basic salt. Polygallic acid is somewhat exceptional among the saponins in being more soluble in 90 per cent. alcohol than in water. In this respect, however, it resembles many of the more complex organic acids and their anhydrides, e.g., the free form of glycyrrhizin, to say nothing of the resin acids.
- Buchu, Caraway, Gentian, Grindelia, Stramonium and Uva Ursi
- In alcoholic tincture, especially if absolute alcohol be employed, give a yellow or greenish-yellow, followed by a purple. Watery preparations, e.g., inf. uva ursi, give a poor result.
- Logwood
- Gives a purple, succeeded by a yellow, both (apparently) due to haematoxylin, but the drug also contains quercetin.
- D.—DRUGS YIELDING OTHER COLOURS**
- Many leaf and herb extractives in 90 per cent. or absolute alcohol, e.g., of digitalis, hyoscyamus and belladonna, also ethereal tr. of lobelia
- These show a green, due to chlorophyll, followed by a purple. The B.P. tinctures of the leaves named show a poor yellowish-green, followed by a dull purple. Tr. lobeliae ætherea gives a particularly good play of green, purple and plum colours which is not given by a proof spirit tincture of lobelia. The chromogen in this case is evidently not readily soluble in alcohol, but is in spirit of ether.
- Kava-Kava, ext.
- Gives a characteristic evanescent salmon to dull red.
- Strophanthus, tr.
- Characteristic green, followed by a good purple, due not to chlorophyll but to the glucosidal saponin strophanthin. This chromogen is soluble both in water and alcohol. It is an acid body, being precipitable by neutral lead acetate.
- Zingiberis, tr.
- Gives an evanescent blue to the general test. If the mixture be carefully concentrated to a certain point and the excess of acid liquid thrown away, the film, if dried, will give a fairly lasting blue to dilute nitric acid.
- With regard to the chemical nature of the bodies producing these colours, the yellow colour-producer is, in most cases, of the anthoxanthin (flavone, flavonol and xanthone) class. Some of the drugs listed in classes B and C contain quercetin or allied flavonols. Gentian contains a xanthone. Many of the extractives listed give, as such, all the reactions of flavonols. Most barks, leaves, flowers and fruits contain flavonols or allied bodies, but in the majority of drugs these bodies are not present in sufficient quantities to reveal themselves readily to tests, unless special methods of extraction are used: or other bodies give masking colour-reactions: but there are a number of drugs in which flavone bodies may be readily demonstrated.
- The usual text-book reactions for these substances are as follows: Add a few drops of the extractive to solution of ammonia—a golden-yellow to orange colour should be given; lead acetate solutions give precipitates possessing similar colours, whilst ferric salts give either a green or a brown-coloured solution. All drug extractives which give the foregoing reactions well give also a yellow, orange, or reddish-coloured reaction, most frequently yellow, when evaporated with dilute sulphuric acid. This reaction (yellow) is also given by the flavonol quercetin in the pure state. It is evident, therefore, that this colour-test should be included amongst the test-reactions for flavonols. The majority of these bodies are phloroglucinol derivatives, and some are also protocatechuic derivatives. Both of these hydroxy-benzene derivatives yield a yellow if dissolved in alcohol containing a few drops of dilute sulphuric acid, and the mixture caused to evaporate by burning it. The yellow colour, which is particularly brilliant in phloroglucinol, follows the flame, on the side of the dish, as the former burns down. Other results, to be given presently, bear out the view that the colours produced by the test under discussion are very frequently partly determined by the presence of bodies derived from, and closely related to, certain of the di-hydroxy and tri-hydroxyphenols and their corresponding acids. Very few of these purple colour reactions with sulphuric acid have been previously recorded, and only in a very small proportion of known cases has any explanation been given. Loganin, strophanthin, phleridzin, some of the saponin glucosides, and some resins are known as purple-producing chromogens, with sulphuric acid, and it is to be noted that these are all glucosides, or resins. Of course, many bodies, such as many alkaloids and phytosterols, will give colour reactions, varying from red through purple to

violet, with sulphuric acid *plus* other special reagents. But when so many different drugs, tested by precisely the same method with dilute sulphuric acid alone, yield in many cases apparently precisely the same colour, it is legitimate to assume that the ultimate causes of this colour are likely to be few. Resorcin, pyrogallol and gallic acid, in dilute solution in alcohol, if evaporated with dilute sulphuric acid, all yield a beautiful rose-coloured film, sometimes accompanied with other colours, on the side of the dish. This is best seen by setting fire to the mixture and occasionally rocking the dish. Hydroquinone gives no result. Catechol gives a less distinct rose colour in alcohol. The yellow colour-reactions of phloroglucinol and protocatechuic acid have been previously referred to. Gallic acid will give the same rose-purple if a pinch be evaporated with water instead of alcohol. If a little glucose be included with the gallic acid in the water no characteristic result is obtained on evaporation, but if alcohol be the solvent, glucose does not prevent the reaction. These reactions throw considerable light upon the behaviour of many drugs yielding reds and purples with sulphuric acid. A considerable proportion of such drugs are known to contain pyrogallol, gallic acid, catechol or resorcinol derivatives. In certain cases such compounds have been isolated in the pure state, and it can be shown that they give the reaction under discussion. Tincture of logwood yields a good rose-purple followed by a yellow colour. A precisely similar result is shown by haematoxylin. The colour-reactions of this body can be well explained if the constitutional formula devised by Pfeiffer and afterwards confirmed by the synthesis of haematoxylin by Perkin and Robinson be accepted. This formula shows that the chromophore is the dihydro-pyran nucleus and the auxochromes are a residual pyrogallol nucleus and a catechol group. Again take ordinary tannic acid, this is known to be a glucoside of gallic acid, containing very little glucose. If tested in the same way as gallic acid with dilute sulphuric acid it yields a good purple in alcohol solution but not in water solution. The same result is given by an alcoholic tincture of galls but not by a watery extractive. This result is a parallel to that obtained with gallic acid and glucose in water and previously described. It seems fairly evident that the glucose liberated by hydrolysis inhibits the production of colour. In the strongly alcoholic solution no hydrolysis takes place. With gallic acid and glucose it is indeed possible that a synthesis of a glucoside takes place in alcoholic solution, for catalytic hydrolyses of glucosides are reversible. The writer has actually succeeded in synthesising a glucoside of cinnamic aldehyde by this method, using a 66 per cent. alcohol and refluxing. The body was a resin and if freed from excess of the aldehyde gave a purple with sulphuric acid in fairly concentrated hot admixture; if dissolved in rectified spirit containing cinnamic aldehyde it gives the same reaction at a lower temperature and greater dilution. The colour reaction is in very many cases probably due to a glucoside either existing in the extractive or actually synthesised by the application of the test. If this assumption be correct it may help to explain why alcoholic extractives give better results than aqueous preparations. Watery preparations of both acacia arabica bark and bael fruit, however, give two of the finest purples that can be obtained. In the former the chromogen appears not to be readily soluble in alcohol, but in the latter it is soluble either in alcohol or water. Acacia bark contains a large quantity of pyrogallol tannin, and probably this or a related body is the chromogen. Unripe bael fruit used for making the extract contains no tannin or gallic acid. If reduction of Fehling's solution is any criterion, bael fruit appears to contain a glucoside, since the reduction is greater after hydrolysis than before. If this glucoside is the chromogen, it cannot be a gallic acid glucoside closely related to tannin, or it would give the ferric salt reaction and would not give such a good purple reaction in water solution. This is borne out by a consideration of hamamelis bark and leaves, and of rosa gallica petals. In all these drugs there is gallic acid, and in hamamelis probably a pyrogallol tannin also, but it is only in tincture of hamamelis, which is made from the bark, and contains very little flavone body, that any appreciable purple with the sulphuric acid test is obtained. There is so much

flavone glucoside in hamamelis leaves and rose petals that the glucose liberated by hydrolysis apparently inhibits the action of the acid on the gallic acid. In bael fruit, however, even the addition of glucose does not inhibit the production of purple. It is interesting to note that the recent Atkinson-Hazleton test for tannins reveals the fact that there is much tannin as well as gallic acid in rose petals. This tannin is known, however, not to be a pyrogallol tannin. The colour reaction given by infusion of roses with ferric salts can be made also to yield either the green of catechol tannins and quercetin or the blue due to the gallic acid. Thus the gallic acid is certainly not present in relatively large quantity. In hamamelis extract, however, there is a relatively large proportion of pyrogallol bodies, and the glucose liberated from the flavone bodies, etc., is unable entirely to inhibit their action with sulphuric acid, for if the yellow due to the flavone is destroyed by holding over vapour of ammonia, a dull red-purple is revealed. Phloridzin, a phloroglucinol glucoside, found in many plants belonging to the rosaceæ, also yields a purple to sulphuric acid. Many resins, which give purple reactions, are, of course, di- or tri-hydroxy-phenol derivatives, or contain groups derived from both classes of phenols. The writer, of course, does not suggest that purple, violet or blue colour-reactions with sulphuric acid are always due to bodies having phenolic groups of the kind indicated. The majority of the classes to which artificial dyes belong are either not represented at all or but poorly represented by naturally occurring plant chromogens and their coloured products. Few nitrogen chromogens occur in plants. The indigo chromogens and a few alkaloids are the most important exceptions. Alkaloids, however, seldom, if ever, give good purples with sulphuric acid alone. This applies also to phytosterols and other bodies which give good colour reactions with sulphuric acid and other reagents combined. Such bodies also are usually present in too small quantities to react unless special methods of extraction are employed. There are, however, a few aromatic alcohol and aldehyde bodies, generally probably glucosidic, which yield purples, e.g., salicin and the cinnamic aldehyde glucoside previously referred to, which give purples to this test. Experiments seem to indicate, therefore, that good purple reactions are, in most cases, due to bodies having di- or tri-hydroxy-phenol groups, or acid groups derived from these, and that most frequently such bodies are glucosides or resins.

Coming Events

Wednesday, January 30

Birmingham Pharmaceutical Association, Queen's College, Paradise Street, at 8.30 p.m. Lantern lecture on "The Dutch East Indies," by Mr. E. M. Mellor, F.R.G.S.

Liverpool Chemists' Association and Branch of the Pharmaceutical Society, Royal Institution, Colquitt Street, at 8 p.m. Mr. Harold Wyatt, J.P., Ph.C., on "Reminiscences of Continental Pharmacy."

Manchester and Salford Chemists' Assistants' Association, University Students' Union. Dance. Tickets, 3s. 6d. inclusive.

Manchester Pharmaceutical Masonic Association, Victoria Hotel, at 6 p.m. Ladies' evening. Dinner, whist drive and dance. Tickets (10s. 6d. each) from Bro. H. Woodhead, Church Street, Eccles.

Pharmaceutical Society of Great Britain, 36 York Place, Edinburgh, at 8 p.m. Evening meeting. Papers on "A Pharmacist's Experience of the Blood Sugar Test," by J. H. Macpherson, Ph.C.; "The Common Daffodil as a Poison," by T. Wilson, Ph.C.; "Incompatible Mixture: Mercuric chloride, quinine and strychnine," by J. S. B. Heddle.

South-West London Chemists' Association, Anderton's Hotel, Fleet Street, at 6.30 p.m. Reception and dinner. Tickets (9s. each) from members of Council, or Mr. D. A. Rees, 224 Coldharbour Lane, S.W.9.

EALING PHARMACISTS' ASSOCIATION.—The annual dinner will be held on February 6 at the Connaught Rooms, Great Queen Street, London, W.C.1, at 7 for 7.30 p.m. Tickets from Mr. W. T. Style, 188 Acton Lane, W.4.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN (READING BRANCH).—The first annual social will be held at the Central Café, Friar Street, on February 6, at 7.30 p.m. Music and dancing. Light refreshments provided.

Insurance Remuneration Factors

THE discussion which took place on the fourth day of the sitting of the Departmental Committee on the Drug Tariff (1915) between one of the members of the committee (Mr. Vivian) and two medical practitioners representing the British Medical Association is illuminating as showing the mathematical precision with which the various services rendered by the chemist who undertakes Insurance dispensing were assessed by the committee. We print below a summary which gives the main points of the discussion. To save space we have not quoted it in the form of question and answer, as it is recorded in the minutes of evidence.

Let us take the case of a chemist running his own business and doing all the work himself. The chemist is doing everything, acting as salesman, dispensing, and has his own capital invested in the business. Let us analyse the factors in his business, and see what he is entitled to get returns upon. He is entitled to be recouped in the first place for the whole of his outlay for materials, rent, rates, taxes, wages of errand boy, and all other establishment charges, including losses, breakages, and things of that sort. Then he is entitled to receive interest upon his capital, earnings of management, and wages or salary for his own personal services in his double capacity of salesman and dispenser. He is acting in both capacities, and is entitled to be paid for the proportion of time he spends in either capacity at the market rate current for that particular service. (1597-99)

We separate the dispensing service from the others because they are remunerated at different market rates. . . . A skilled dispenser is worth a good deal more than a counterman, and for that reason we must be careful not to group, in the dispensing services, more than the services which really require professional skill. . . . We want to exclude the services which should not be paid for at the rate appropriate to high professional skill. To take a concrete example, the wrapping up, labelling, sealing, and that sort of thing have not to be paid at the rate which a professional man is entitled to earn. Those services are of the nature of salesmanship. . . . The distinction is between salesmanship, involving handing over the counter and other allied operations, and dispensing proper, that is to say, operations which necessitate a high degree of professional skill in compounding and handling delicate and poisonous drugs. (1600-07)

Excluding for the present the cost of raw material in the case of manufactured medicine and the cost of the article in the case of appliances or patent medicines, and taking out also the strictly professional dispensing services, what we have left is rent, rates and taxes, lighting, heating, cleaning, and the errand boy, interest on capital, earnings of management, and the return for the services of the chemist as a salesman. This group of factors, alluded to as trade profits, are incidental to the conduct of the business as a whole; they are preliminary to any sales at all, and therefore only partly chargeable to the Insurance dispensing section of the business. . . . Salesmanship is an item in the cost of every sale, and is a proper charge on every sale. (1612-14)

That group of factors which is common to all the business a chemist does we will call the common factors. . . . An analysis of a chemist's business under the Insurance Act shows that it falls into two or three classes. . . . The sale and supply of appliances or other people's proprietary medicines is purely what one would call a middleman transaction, using the word in the economic sense that the article leaves his hands as he receives it. . . . This is different from any other part of his business in which he handles or compounds drugs with a greater or less degree of professional skill. . . . Passing from the middleman business, you get next a business which may be put in two classes, though these in reality are continuous. At the lowest end of the scale you have the dispensing of a single uncompounded drug. From that you go up in a crescendo scale of professional skill to the top of the scale involving the maximum exercise of professional skill, where you have the compounding of an elaborate prescription of many ingredients in the most difficult medicament form. (1615-18)

Different transactions falling within these different classes will comprise different factors of the cost of production or the same factors in varying degrees. Take the middleman transaction. If the chemist charges the cost price to himself of the appliance or patent medicine, and

if he charges in addition what we have defined as the common factors or trade profit, there would be nothing more to be charged there at all, bearing in mind that the common factors contain everything except the cost price of the article or materials and the professional dispensing services. (1620-21)

It would be a convenient method of pricing the common factors to charge them in the form of a rate per prescription. Whether you called it a dispensing fee or a charge for trade profit would not matter very much. There is no inherent necessity to price the trade profit in the form of a percentage on the cost of material. . . . To arrive at the amount to be charged for these factors, the Committee might assess the actual cost, and then spread them over the trade in some proportion in order that the whole cost may be recovered by the chemist over all his business. . . . That is what the ordinary business man does. He calculates his fixed charges, considers his turnover, and spreads his charges over the turnover in the proportion they bear. . . . The object is to get back on the whole of the year's business the total cost of the fixed charges for the year. . . . In the case of the chemist there is nothing inherent requiring those charges to be made on a percentage. The point is to get a constant basis. . . . The value of the material is not the most constant basis you can get. . . . The most convenient way of pricing the trade profit or common factors is to split them up into a rate per prescription. . . . The prescription is really the transaction, the sale. There is not very much point in pricing them as a percentage on material. . . . A more reasonable method of spreading out the common factors so as to get them back on the year's business is to put them as a charge per prescription. (1622-35)

Is it feasible to price in this way: a flat-rate charge for all the common factors, that is, the charge for every element in the cost of production save cost of material and professional labour, is to be made in the form of a flat rate per prescription. . . . Then on any given prescription you have the cost of the material if it is a compounded medicine, and if it is an appliance or ready-made medicine the cost to the chemist of the article. . . . In the case of the middleman transaction that would be the whole price, but to meet the case of prescriptions involving the compounding or dispensing of drugs with varying degrees of skill you would want, in addition, a scale of dispensing fees. . . . You may call your flat-rate charge per prescription for the common factors a dispensing fee if you like, and it would then form the bottom rung of the ladder. But in any case you need a scale of dispensing fees proper. (1652-57)

Trade-marks Applied for

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary," 1924, p. 289.

- (From "The Trade-marks Journal," January 16, 1924.)
 "VAPO"; for a toilet lotion (48). By Osmos Salts, Ltd., 26 Burdon Street, London, E.C.4. 441,359.
- (From "The Trade-marks Journal," January 23, 1924.)
 "DUROMAX"; for all goods (1). By A. H. Davis, Ltd., 25-39 Maguire Street, Liverpool. 443,154.
 "PHYTOPHILINE"; for all goods (2). By N. V. Maatschappij tot Voortzetting der Zaken van de Maatschappij "Phytobie" Internationale Maatschappij tot Verdelging van Dierlijke en Plantaardige Parasieten, Molenstraat 15, The Hague, Holland. 442,426.
 "BEESTOL"; for cattle dip (2). By Morris, Little & Son, Ltd., 42 Hallgate, Doncaster. 443,268.
 "VERMICINE"; for disinfectants, etc. (2). By A. K. T. Buckley, 9 London Road, London, E.C.3. 443,591.
 "PHARMASOL"; for medicinal chemicals (3). By The Anglo-French Drug Co., Ltd., 238A Gray's Inn Road, London, W.C.1. 442,412.
 "POTTS' INFANTS' FRIEND," with device of child and triangle ("Potts" disclaimed); for an infants' medicine (3). By Chas. Potts, Ltd., 166 Bath Street, Ilkeston, Derbyshire. 441(373) (Associated).
 "FRUITINE"; for an aperient medicine (3). By Allen & Hanburys, Ltd., 37 Lombard Street, London, E.C.3. B442,975.
 "BONGAY"; for pharmaceutical preparations (3). "KILIGNEM"; for fire extinguishers (6). By Bengue & Co., 52 Charlotte Street, Oxford Street, London, W.1. 443,403; 442,652.

Festivities

Social at Lowestoft

THE Lowestoft Pharmacists' Association held the annual social, on January 17, at the Café Cosmo, when about 100 guests were welcomed by the President (Mr. Perrédès). At the conclusion of the whist drive the prizes were distributed by Mrs. Perrédès, and the party adjourned for supper. Dancing commenced at 11 p.m. and continued till 1 a.m. The evening was thoroughly enjoyed.

Scott and Turner's Annual Party

THE annual party in connection with Scott & Turner, Ltd., manufacturing chemists, Newcastle-on-Tyne, was attended by Mr. Gerald A. France (chairman and managing director), Mrs. Harrison Smith, Mr. Rutter Carr, M. J. E. Diamond (works manager), Mr. C. W. Huntington (secretary), Mr. S. Traves (sales manager), Mr. G. H. Chantler, and others. Mr. France said they had had a record year for the third time in succession.

Whist Drive at Manchester

JAMES WOOLLEY, SONS & CO., LTD., held a whist drive at Roberts' Café, Market Place, on January 18, in connection with their Cricket Club. Over a hundred employees and friends assembled. The duties of M.C. were carried out by Mr. H. Hedley and Mr. W. H. Jacques. Mrs. Woolley presented prizes to the successful players as follows:—*Ladies*: Miss A. E. Edwards, Miss C. Hall, Miss F. Murray. *Gentlemen*: Mr. G. Mills, Mr. G. N. Birch, Mr. R. Hyde. A thoroughly enjoyable evening was spent. The prizes were presented by the directors.

Glasgow Whist Drive

THE Glasgow Pharmacy Club held a successful whist drive on January 15. Although there was not the usual numbers taking part, an enjoyable evening was spent. After tea, Mr. Arthur presided at the concert which had been arranged by Mr. Shepherd. The programme comprised solos and duets by Misses Jeffrey and Muirie and Mr. Gilchrist, while Mr. Shepherd presided at the piano. During the interval the chairman announced the prizewinners, who received their respective prizes from Mrs. Crombie:—*Ladies*: Mrs. Seivwright and Mrs. G. Mackay. *Gentlemen*: Mr. W. D. Paterson and Mr. R. Dickson. Mr. Paterson proposed a vote of thanks to Mrs. Grierson, the donor of the prizes, and votes of thanks were accorded the artistes.

Children's Party at West Ham

THE West Ham Association of Pharmacists held a successful Children's Party on January 10 at the Salisbury Hall, Stratford. At 3.30 the little guests were received by the President (Mr. J. Reed) and Mrs. Reed and a willing band of helpers. The guests did full justice to the good things which the Ladies' Committee had provided, and after tea balloons were let loose, games and competitions were enjoyed till the time came for going home. A bran-pie was produced, and each child received a gift, which was provided by S. Maw, Son & Sons, Ltd., and May, Roberts & Co. The Ladies' Committee, who provided the refreshments, were: Mrs. Reed, Mrs. Gwinn, Mrs. Desmond, Mrs. Evans, Mrs. Potter, Mrs. Pratt, Mrs. Pennington, and the Misses Kirkpatrick, Thomas and Lowe.

Oldham Chemists' Dinner

ABOUT fifty members and friends of the Oldham Pharmaceutical Association attended the annual dinner held recently at the Central Café, Oldham. "The Pharmaceutical Society" was proposed by Mr. W. Yates, of Shaw, Mr. L. Moreton Parry (member of the Council of the Pharmaceutical Society) responding; "The Retail Pharmacists' Union," by Mr. F. Newby, responded to by Mr. G. A. Mallinson, secretary of the Union, and Mr. J. E. French, chairman of the National Health Insurance Section of the Union; "The Ladies," by Mr. J. R. Richardson, and acknowledged by Mrs. T. Baker; and "The Association," by Mr. Charles Heath, jun.,

of Manchester, replied to by Mr. Baker. The remainder of the evening was devoted to miscellaneous entertainment and dancing. Songs were sung by Mrs. Picken, Manchester, Mr. Nield, Oldham, and Miss J. Ashworth, Oldham. Mr. Hampson gave two recitations.

Harrow Chemists' Dinner

NEARLY 50 members and friends of the Harrow Pharmacists' Association sat down to the annual dinner, on January 16, under the chairmanship of the President, Mr. W. R. Hoare (Harlesden). The gathering was a record one. Following the loyal toasts, Mr. W. B. Nelson submitted "The Harrow Pharmacists' Association." Pharmacists of to-day, he said, are more business-like and better organised than their predecessors, and it was well they were, for in these days, with the Insurance question and the Dangerous Drugs Act, it was necessary that they should protect themselves. The Harrow Association was fortunate in having as President a hard worker and a keen business man who had the interests of the Association so much at heart. Mr. W. R. Hoare, replying to the toast, said they started from very small beginnings, but he was glad they had improved every year, and in this their tenth year they showed further progress. Mr. John Humphrey submitted "The Pharmaceutical Society," and coupled with the toast the name of Councillor Marns, who emphasised the value of the local Associations co-operating with the Council in their work. He had had two years of council work, and he believed that those members who adopted a critical attitude and remained outside should rather come in and help to bear the brunt of the work. The members got the Council they deserved, and he had found in his official capacity that it was one thing to criticise and another, and much more difficult job, to act constructively. "The Wholesale Houses" was proposed by Mr. Cox, and Messrs. White, Taylor, and J. Abernethy responded. The final toast, "The Visitors," brought an enjoyable evening to a close, much of the success of which was due to the efforts of Mr. J. Taggart (Harrow).

Hull Chemists' Dinner

THERE was a good attendance at the Hull Chemists' Association's annual dinner on January 17, Mr. W. G. Bennett (President) in the chair. Proposing the toast of "The Medical Profession," Mr. T. Smith spoke of the value of the work done by the doctors, and said that the chemists' ambition was to keep pace with scientific and medical progress. Dr. Lilley, responding, said that chemists were living in a new era in Hull. So far as the medical profession were concerned, it was their desire always to work in harmony with the chemists. Mr. John Lewenstein said that the changes that had come over the pharmaceutical profession and the Hull Chemists' Association during the past twenty years or so were hardly believable. This year the Association had younger officials than it had had for some time. In Mr. Bennett they had a President who had done his work thoroughly, even to the point of acting as Father Christmas for the children at their party. (Laughter and applause.) Mr. W. G. Bennett, the President, responded to the toast of "The Hull Chemists' Association." They had had locally in pharmacy an overplus of associations, and they were on the eve of rather important changes. They were on the eve in Hull of an amalgamation—or, rather, an absorption—of the old Hull Chemists' Association by the newly formed branch of the Pharmaceutical Society. With regard to Insurance work, some of them had become very despondent; they did not know if they would ever get justice from the authorities. Still, they kept on hoping, and if they kept their associations together—particularly the Retail Pharmacists' Union and the local branch of the Society—they would pull through. Dr. Lilley had mentioned the delay in dispensing prescriptions. If they would look at the prescriptions they would generally find that the fault lay with the insured person. A musical programme was ably provided by Miss Winnie Cawcutt, Miss Dorothy Lee, Mr. Alan Spilman, Mr. Dan Gordon, Mr. Bernard Wallis, and Mr. Soar.

Associations' Winter Session

Liverpool.—Following the presidential address by Mr. A. W. Ashcroft (*C. & D.*, January 19, p. 98) came a discussion on the presidential commendation of "first-aid" classes and certificates for pharmacists, which was endorsed, together with his advice to the younger members not to let attention to social recreations overshadow the development of their scientific attainments. The presence of Mr. F. A. Boggiano, Mr. W. J. Tristram, and other members of the Pharmacy Club (which had postponed a dance party in order to support the parent association) was recognised. Mr. J. L. Hirst (hon. secretary) and Mr. Harold Lomax gave striking examples of lives they had saved by first-aid, and the injustice of withholding the liberty to pharmacists to charge for first-aid was impressed on the audience. The status of pharmacists in the British Army was reviewed in the wars from the Crimea onwards, and a pessimistic view taken of the future soldier-pharmacist. On volunteering for the South African War over twenty years ago, Mr. Lomax said he was first employed as a camp policeman and later as dispenser, his rank and pay being that of "doctor's labourer." (Laughter.) When the discussion turned to the direct supply of "first-aid" cabinets to manufacturers, Mr. Lomax stated that a firm to whom he had quoted on request 22s. 6d., replied that they had accepted a 19s. 6d. quotation, less the cocaine drops, the bottle for which was left empty. He was invited to fill the bottle, and he declined, stating that he would supply the whole cabinet or nothing. (Applause.) The case for the wholesalers in face of competition was stated by the representative of a firm which had not approached the factories. Throughout the proceedings were most harmonious, and it was reported that one of the new members elected had been so impressed by the tone of the meeting recently addressed by Lord Leverhulme that he felt he ought no longer to hold aloof from the association. The following gentlemen, who had been duly nominated for election to the Council, were elected, no ballot being necessary:—Messrs. W. H. Clubb, D. H. Evans, A. J. Ferriday, T. W. Fletcher, A. S. Furniss, John Jones, J. McInroy, J. Paley, Dr. C. Symes, J. G. Wallbridge, C. Wherley, T. S. Wokes, Harold Wyatt, with A. W. Ashcroft (President), Martin S. Hughes (hon. treasurer), and J. L. Hirst (hon. secretary).

Sheffield.—At a meeting of the Sheffield Pharmaceutical and Chemical Society, on January 16, Canon Spencer H. Elliott, diocesan missioner, lectured on *Faust, the alchemist*. An interesting suggestion as to the origin of the story of the death of Faust was given. The legend was that Faust had been killed by the devil, as people knew that he dealt in the black arts, and he was thought to have sold himself to the devil. Canon Elliott's suggestion was that Faust was torn to death by his own dog. This story was borne out by the mention of a dog in Goethe's "Faust," and did not in any way affect the moral of the original story. The English version of "Faust" was by Marlowe, a pre-Shakespearean dramatist, who told a story of two angels, good and bad, who fought for Faust's soul. This was the natural outcome of the morality plays from which the drama in England sprang, and was exactly the type of story told by the morality plays. Gounod's "Faust" was of a much later period. The lecturer concluded with a dramatic rendering from Marlowe's play. On the motion of Mr. H. Antcliffe, seconded by Mr. J. Gilbert Jackson, a hearty vote of thanks was accorded the lecturer. In reply, he said that he should like to take the opportunity of assuring the pharmaceutical profession of the entire confidence of the public which they enjoyed. He said the thinking public realised the care which was needed in dealing with the various preparations in the dispensing of their medicines, but they accepted them with full confidence, knowing that the chemists faithfully carry out the wishes of the doctor. The monthly prize-winners in the Students' Competition resulted in Mr. S. Meakin, although carrying the handicap of 3 points, coming out top, but as he had already

won 3 prizes, he refused to take the prize, and Mr. J. M. Drabble took the first and Mr. H. Hill the second. Miss Enid Cooper won the first ladies' prize, and Miss Greenfield second.

Women Pharmacists.—At a meeting of the National Association of Women Pharmacists, on January 16, at the Hotel Russell, London, W.C., a large number of members and friends assembled to hear Mr. Edmund R. Abbott, clerk to the Middlesex Insurance Committee, deliver an address on *National Health Insurance as Affecting Public Health*. The lecturer said that the commencement of State interference on behalf of the health of the labouring classes may be said to date from the publication of a report by Dr. Smithwood Smith to the Poor Law Commissioners in 1838. From then public opinion advanced until the first Public Health Act was passed in 1875. Sir Arthur Newsholme says this Act incorporated the tripod upon which enlightened public health administration must always be supported: Attack on the causes of sickness; satisfactory treatment of the sick; satisfactory care of the poor. To a great extent the Ministry of Health Act of 1920 co-ordinated the central departments dealing with Public Health, but we still have County Councils, County Borough Councils, Urban District Councils, Rural District Councils, Poor Law Guardians, Insurance Committees, and Education Committees, all dealing with Public Health matters in more or less watertight compartments. The officials of the Ministry of Health have been obliged to give up much of their time to the urgent need of housing and other pressing matters, and the longed-for co-ordination has been postponed. The lecturer briefly touched on the condition of the sick poor in industrial areas prior to 1911, and proceeded to describe the application of the Insurance Acts. Some approved societies are assisting insured persons to obtain nursing, dentistry, and hospital treatment out of their surplus funds. With regard to medicine, the doctor, if in a town area, will give a prescription for any drugs or medicines necessary for treatment, no matter how expensive, if really necessary. It is the doctor who is the judge of this, and he may be called upon to justify very expensive drugs, but if given bona-fide, he has nothing to fear and the insured person is in no way concerned, nor indeed is the chemist. Since the first of January an insured person can change his doctor at any time by taking his medical card to another doctor and getting him to accept him; in the same way a doctor can get rid of his patient whenever he likes except during an illness. The only people who do not seem to have the right to refuse insured persons are the chemists, but they are well known as a pleasant and accommodating community. They tell us (said Mr. Abbott) that in undertaking National Health Insurance work it is merely out of their goodwill towards the State, of which they are members. At any rate, they grin and bear their troubles without worrying and writing to the public newspapers, although in their own particular periodicals grousing is not unknown. Is this service by doctors and chemists satisfactory? Dealing with the last first, it is generally admitted by people who know, that insured persons are obtaining better medicines than ever before. In conclusion, many of the allegations against the medical service for insured persons are exaggerated; they arise largely from the fact that the Act has never been free from politics. It was introduced with too much of a flourish of trumpets; it was supposed to be going to do a great deal more than was possible; but from the public health point of view it has been of great benefit to the community, and has enabled the working population to obtain medical treatment in the early days of illness, has provided them with proper medicines, and has formed the basis for a complete medical service if and when financial considerations will permit of its extension. Mrs. Freke (President of the Association) was in the chair, and among those present were Mrs. Abbott, Mr. and Mrs. A. R. Keith, Mr. and Mrs. H. A. Irwin, Mr. A. R. Melhuish, Mr. Harry Martin, Mr. J. P. Ellerington, Mr. Bonner, and Mr. Tocher.

Trade Report

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling, packing, etc. Qualities of chemicals, drugs, essential and fixed oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities.

42 Cannon Street, E.C.4, January 24.

BUSINESS in the Mincing Lane produce markets has been overshadowed this week by the accession of a Labour Government, and the commencement of a railwaymen's strike, both of which events have been accepted with the usual philosophic calm in the City. Another disquieting feature has been the renewed weakness in the value of sterling on New York, and further erratic fluctuations in European rates of exchange. Interest in crude drugs this week has centred in the first auctions of the year, when only moderate supplies were offered. Privately there have been few changes, these including an easier tone in senega; copaiba balsam, on the other hand, is rather dearer. Madras finger turmeric is still advancing, and carnauba wax is firmer; cube gambier is scarce and dearer on spot. Cocoa butter is 1d. higher, and olive-oil is very firm owing to short new crops in Spain and Italy. Menthol is on the easy side, but Japanese mint-oil is very firm and dearer. Among pharmaceutical chemicals, business is small, and the general tone is unsteady, and although there are no substantial changes, prices favour the buyer. Among industrial chemicals, prices are in some instances easier, but the railwaymen's strike is having prejudicial effect on any improvement in demand. Coal-tar products are unsteady, benzol, pitch, cresylic acid and pyridin having declined. Other changes include an easier feeling in mercury, and a short advance in antimony.*

Higher	Firmer	Easier	Lower
Antimony	Acetic acid	Benzoin (Sumatra)	Benzole
Cardenom	Bergamot oil	Citronella oil	Camphor oil
Cocoa butter	Cassia lignea	Cloves (Zan.)	Cassia fistula
Copaiba	Mint oil (J.P.)	Orange oil (Sic.)	Gentian
Creosote oil	Pimento	Guaiacol carb.	Liquorice root
Gambier (cubes)	Wax, Carnauba	Pepper, white Muntok	Pitch
Honey		Phenazone	Potash
Ipecacuanha		Pyridin	Rhubarb (high-dried flat)
Mace		Senega	Shellac
Mint oil (J.P.)			Sodium sulphite
Senna (Thun.)			
Pods			
Turmeric			
Turpentines			
Wax, Bees', Jam.			
Wood oil (Bangkok)			

Exchange Rates on London

The following is a list of Continental and other exchange rates against the pound sterling on London prevailing at 4 p.m. on Wednesday :—

Place	Method of Quoting	Par of Exchange	January 16	January 23
Amsterdam	Fl. to £	12.107	11.40—11.40½	11.39½—11.39½
Berlin ..	M to £	20.43	17·19 billions*	17·19 billions*
Brussels ..	Fr. to £	25.22½	101—101½	104—104.50
Calcutta ..	Per rup.	24d.	17½d.—17½d.	17½d.—17½d.
Christiania ..	Kr. to £	18.159	29.93—29.97	30.43—30.48
Constantnople ..	Pst. to £	110	810—830	800—820
Greece ..	Dr. to £	25.22½	215—220	217—227
Italy ..	Lire to £	25.22½	97½—97½	97.12—97.37
Kobe ..	Per yen	24.58d.	24½d. (buyers)	25½d.—25½d.
Lisbon ..	Escu.	53½d.	1½d.—1½d.	1½d.—1½d.
Madrid ..	Pts. to £	25.22½	33.18—33.20	33.24—33.26
Montreal ..	\$ to £	4.86½	4.36½—4.36½	4.31½—4.32½
New York ..	\$ to £	4.86½	4.25½—4.25½	4.21½—4.21½
Paris ..	Fr. to £	25.22½	91.15—91.25	94.10—94.30
Singapore ..	Per dol.	—	28½d.—28½d.	28½d.—28½d.
Switzerland ..	Fr. to £	25.22½	24.58—24.62	24.42—24.44
Vienna ..	Kr. to £	24.02	300,000—310,000	300,000—305,000

* Nominal.

Cablegram

NEW YORK, January 22.—Business is quiet. Menthol is dearer at \$12.50 per lb., and taraxacum root has advanced to 37c. per lb. Balsam Peru is higher at \$1.80. Cascara sagrada has declined to 26c. per lb., and serpentine root to 83c. Oregon balsam of fir has declined to \$1.50 per American gallon.

Revue des Marchés

Sommaire des principaux mouvements des prix des drogues, essences, produits chimiques et pharmaceutiques sur le marché de Londres.

Abréviations d'usage employées pour indiquer les mesures de poids et de capacité:—Ton = 1016 kg.; Cwt.=50,8 kg.; lb.=453 gr.; oz.=28,34 gr.; Gal.=4546 c.c.

MALGRÉ l'incertitude actuelle, il est manifeste que la situation de l'industrie anglaise s'améliore, et on constate une réduction dans le nombre de sans-travail. Les perspectives de l'industrie chimique apparaissent des plus favorables, notamment dans les matières colorantes, dont l'exportation accuse une augmentation sensible depuis le commencement de l'année. On signale que des maisons françaises offrent des matières colorantes d'origine allemande en fortes quantités, apparemment provenant des saisies opérées dans la Ruhr, à des prix qui ne correspondent nullement aux prix de revient. Cependant, la loi sur les matières colorantes protège le marché anglais contre toute concurrence de cette nature, et chaque demande d'importation est rigoureusement contrôlée. En drogues, le gambier en cubes est rare et en hausse. Le polygala, la gentiane et la réglisse sont en baisse; d'autre part, on constate une avance dans le cours du Baume de Tolu. La cire de Carnauba est en tendance ferme; on signale une avance de 1d. par lb. dans le cours du beurre de cacao. En produits chimiques pharmaceutiques les tendances sont caractérisées par l'instabilité et la faiblesse de la demande et les prix marquent un léger fléchissement. L'acide tartrique est en bonne demande aux cours précédents; en crème de tartre, dont le prix n'a pas varié, on signale une légère intensification de la demande. En dérivés du goudron, le benzol, le brai, le créosol et la pyridine sont en baisse.

Zum Marktbericht

Überblick über die wichtigsten Preisveränderungen auf dem Londoner Drogen- und Chemikalienmarkt.

Abkürzungen:—Ton=1016 kg.; Cwt.=50,8 kg.; lb.=453 g.; oz.=28,34 g.; Gal.=4546 ccm.

TROTZ der augenblicklichen Lage kann man in letzter Zeit die ersten Anfänge einer Besserung in den wichtigsten britischen Industriezweigen beobachten, und das Heer der Arbeitslosen hat sich bereits verringert. Die Aussichten für die chemische Industrie sind verheissungsvoll, namentlich die Farbstoffindustrie verzeichnet eine Belohnung der Ausfuhr seit Anfang des Jahres. In letzter Zeit bieten französische Firmen grosse Mengen von deutschen Farbstoffen an zu Preisen, welche in keinem Verhältnis zu den Herstellungskosten derselben stehen; wahrscheinlich handelt es sich um Posten, die im Ruhrgebiet beschlagnahmt worden sind. Doch das Gesetz zum Schutze der Farbstoffindustrie bietet ein wirksames Mittel zur Verhinderung einer Überflutung des englischen Marktes mit Zufuhren dieser Art, und jeder Antrag auf eine Einfuhrbewilligung wird genau geprüft. Auf dem Drogenmarkt war Würfelgambir knapp und der Preis für Lokoware hat angezogen. Enzian, Senega und Süssholz haben im Preise nachgegeben; dagegen war Tolubalsam höher notiert. Carnaubawachs war fester, und Cacaobutter zog um 1d. per lb. an. Bei sehr kleinem Geschäft zeigte der Markt für pharmazeutische Chemikalien ein unentschiedenes Gepräge, wobei die Preise etwas nach unten neigten. Weinsäure war Gegenstand guten Begehrs, und auch für Weinstein war die Nachfrage etwas lebhafter, bei unveränderten Preisen. Teerprodukte verkehrten unregelmässig; Benzol, Pech, Kresol und Pyridin gingen im Preise zurück.

Crude Drugs, etc.

ANTIMONY.—There has been well-sustained firmness and foreign regulus is again harder to buy, being quoted rather upward of £37 per ton ex warehouse, although there is practically no alteration in best English refined, which stands at about £45. The supply is limited, but a few parcels have been coming in from the Far East. The continued American demand is a feature.

CAMPHOR (REFINED).—Japanese 2½-lb. slabs continues slow of sale at 3s. 7½d. per lb. on the spot, and for January-March shipment 3s. 4½d. c.i.f. is quoted.

CANARY SEED.—Mazagan is very firm and is being held for 25s.

CASSIA LIGNEA is firmer at 50s. per cwt. for selected, and 32s. 6d. for broken on the spot.

CINCHONA.—At the auction held in Amsterdam on January 16 of pharmaceutical bark, 252 bales and 123 cases, aggregating 15,803 kilos., and representing a content equivalent to 351 kilos. quinine sulphate, were sold at prices ranging from 44½ to 100 cents per half-kilo. The next auction will take place February 20.

CINNAMON.—All descriptions have shown an advance lately, and it is anticipated that higher prices must prevail during the next few months.

CLOVES.—Zanzibar are dull of sale and slightly easier at from 1s. 2½d. to 1s. 3½d. per lb. on the spot. To arrive, sellers of January-March shipment quote 1s. 2½d. per lb. c.i.f., and February-April shipment 1s. 2½d. c.i.f. The weekly wharf statistics show 2,839 bales landed and 986 delivered, leaving a stock of 30,100 bales, against 1,461 bales in 1923 and 7,337 bales in 1922.

COCOA BUTTER is 1d. per lb. dearer, C.F.R. being quoted in cwt. less than one-ton lots at 1s. 4d., and other makes at 1s. 3½d. per lb.

COD LIVER OIL.—Our Bergen correspondent writes on January 21, that the market is firm at from 105s. to 107s. per barrel c.i.f. London for finest non-freezing steam-refined quality. The stock is very limited and in the hands of exporters. The new fishery shows that cod is in good condition and yield fat livers.

COPAIBA is rather higher at 1s. 8d. per lb. for B.P., owing to scarcity in New York and the depreciation in sterling.

GAMBIER.—Cubes are scarce and dearer on the spot, about 100s. being asked.

MACE.—In view of the small stocks, buyers have had to pay higher prices of late. West Indian is quoted at 2s. 10d., and pickings at 2s. 4d. per lb.

MENTHOL is quiet and unchanged, sellers quoting 60s. per lb. on the spot for the usual brands, and 55s. c.i.f. for January-March shipment.

MERCURY.—The feeling has been easier again, but some dealers have done slightly more business, partly on export account; the inquiries coming forward in that direction, although more numerous, are still confined to small parcels. Current quotations on the spot range from £9 15s. to £9 17s. 6d. per bottle, less the usual discount. Stocks appear to be very light, but it is reported that a fair amount of mercury will be coming in shortly. Italy has been offering moderate quantities, asking up to about £9 17s. 6d., c.i.f. London, which figure, of course, is at well above buyers' views.

MUSK.—A direct importation of Tonquin natural pod is offered on the spot at 80s. per oz.

NUTMEGS have been sold at higher prices; small West Indian have been quoted at 1s. 5d. per lb. Penang 80's are offered at 1s. 6d., and 65's at 1s. 10d. per lb.

OLIVE OIL has been very firm since the beginning of the season, chiefly owing to the new crop in Spain, Italy and Tunis being well below the average.

OPIUM.—The following report has been received from a Smyrna correspondent:—

SMYRNA, January 12.—We have had a very quiet market during the past fortnight, the only sales to report being ten cases of manufacturing opium (11-per cent.) at about 28s. per lb. Notwithstanding the small demand sellers are not disposed to lower prices; the stock in Smyrna does not exceed 100 cases, the greater part of which is in the hands of two holders, who are not anxious to sell. It is fully expected that buyers for Japan will soon come forward and secure all they can get both here and in Constantinople; they are keeping off at present knowing full well that if they come on the market now they can only buy a limited quantity at advancing prices; therefore they are waiting for a more propitious moment to start operations. The news from the growing districts continues good for the new crop, the sowings having taken place under favourable conditions. Exchange closed to date at Ps. 810 for sterling.

PEPPER is quiet, fair black Singapore offering at 4½d. per lb. To arrive, sellers of January-March and March-

May shipment quote 4½d. c.i.f. London. Fair Tellicherry is 5d. and Aleppy 4½d. spot. White Muntok is quoted at 7½d. spot; to arrive, January-March shipment is quoted at 6½d., and March-May shipment at 7½d. c.i.f. London.

PIMENTO is quiet but firmer, and for forward delivery sales have been made at 21s. per cwt. c.i.f.

PLATINUM.—The tone, if anything, has been the turn easier, not because of any increase in current supplies, but mainly on account of the more restricted demand. Platinum refined is now quoted £27 10s. to £28 per oz., and raw metal £25.

SENEGA is easier, offering at 3s. 1d. per lb. on the spot, in spite of the depreciation in sterling.

HELLAC is cheaper, the spot price of the usual standard TN Orange quality having declined to 285s. to 290s., compared with 300s. a week ago; good to fine second orange is 310s. to 370s.; AC cakey, 290s.; and GAL, 270s. Futures are also lower, March having been sold at from 280s. to 270s. to 275s., and May at 280s. to 267s. 6d. The lower prices are due to the pessimistic feeling at Calcutta, and also to a general slack demand from the consuming markets.

STARCH PRODUCTS.—Dutch farina is quiet at 20s. 6d. to 21s. per cwt. on the spot, and at 20s. per cwt. f.o.b. for January-March shipment. American maize starch powder is 18s. 6d. per cwt. on the spot, and dextrin is 26s. 6d. per cwt. for superior Dutch, and 25s. 6d. for No. 2 on the spot. Best rice starch crystals offer at 40s. for English and 33s. 6d. per cwt. for Continental on the spot.

TURMERIC is dearer, with 95s. per cwt. asked for a few bags of sound Madras finger. Cochin split bulb is 27s. 6d. per cwt.

WAX, CARNAUBA, is firmer at 95s. per cwt. for fatty grey, and 89s. 6d. for chalky on the spot.

Essential Oils

EXCEPT for Japanese mint oil, there is no change of importance to record. Bergamot and orange are tending firmer for shipment, and spot prices for Sicilian oils are below replacement values. The same applies to bois de rose oil. Ceylon citronella is slightly easier, and camphor oil is cheaper, owing to lack of demand.

ANISE (STAR).—“Red ship” on the spot is unchanged at 1s. 9d. per lb. and 1s. 8d. c.i.f.

BERGAMOT.—Some shippers continue to advance their c.i.f. prices for 37 to 39 l.a., from 14s. 9d. to 15s. per lb. being asked. On the spot sales have been made up to 14s. 6d. and sellers.

BOIS DE ROSE (FEMELLE).—The spot quotation of 13s. 6d. to 14s. per lb. is in buyers' favour, as in some directions the price for shipment is 15s. c.i.f.

CAJUPUT on the spot is quiet, with sellers at 3s. 3d. to 3s. 6d. per lb.

CAMPHOR.—Lack of demand has caused a slight decline in the spot quotations, which are 65s. to 67s. 6d. per cwt. for white essential, according to size of drums.

CASIA on the spot is steady at 8s. to 8s. 6d. per lb. for 80 to 85 c.a. Further sales have been made at 5s. 6d. c.i.f. and 5s. 9d. is now asked.

CITRONELLA.—Ceylon is easier at 3s. 9d. to 3s. 10d. per lb. on the spot, and for shipment 3s. 6d. c.i.f. Java oil is about steady at 4s. 6d. per lb. on the spot, and 4s. 4d. c.i.f.

EUCALYPTUS.—The weaker spot quotation last week of 2s. 3d. to 2s. 4d. per lb. for 70 to 75 per cent. cineol, which is unchanged, is not a reflection of the market at the source, which remains firm.

GERANIUM.—Bourbon on the spot is scarce at 35s. per lb. Parcels afloat, delivery in about three weeks, are quoted at 32s. Algerian on the spot is steady at 30s. to 32s. as to seller.

LEMON.—The c.i.f. price for new crop oil is as last quoted, 3s. to 3s. 3d. per lb. as to brand. On the spot there are sellers at from 2s. 10½d. upwards.

LEMONGRASS.—Cochin is quiet and unchanged at 2½d. per oz. c.i.f.; to arrive; on the spot there are sellers at from 2½d. to 2½d.

LIME.—West Indian distilled is unchanged; holders in some directions ask 4s. 6d. per lb., but 4s. 3d. would still buy small lots. Hand-pressed is about 6s. 6d.

MINT.—Japanese dementhrolised Kobayashi-Suzuki is dearer on the spot at 14s. 6d. per lb. The price quoted for shipment afloat is 15s. c.i.f.; January-March sellers quoted 12s. 9d.

ORANGE.—Sicilian sweet remains firm and unchanged at 1s. 6d. to 12s. per lb. on the spot, and from 11s. 6d. c.i.f. upwards to arrive. Bitter is quoted at 10s. 9d. c.i.f.

PALMAROSA on the spot is quiet, with sellers at 18s. to 18s. 6d. per lb.

PEPPERMINT.—American natural tin oil is firm at from 15s. 6d. to 16s. per lb. as to seller.

PETITGRAIN.—Spot sellers quote 8s. 6d. to 9s. per lb. For quantity this can be shaded in some directions.

ROSEMARY.—Spanish on the spot is firm at 1s. 9d. to 1s. 10d. per lb.

Pharmaceutical Chemicals, etc.

BUSINESS has slackened off lately and the general tone of the market is now unsteady. Spot prices seem to have reached their highest point for the time being and may gradually move back to something like their old levels of last November. The position as regards imports from Germany coming under the German (Reparation Recovery) Act, 1920, is so far unchanged. The British Government have made a definite statement in the House of Commons that they will not suspend or withdraw the levy during the time Germany is defaulting.

ACETANILIDE is rather unsteady with not much demand; spot prices are from 3s. to 3s. 3d. per lb. Further imports are said to be coming along.

AMIDOPYRIN shows but little life; dealers quote at about 14s. 6d. per lb.

AMMON. BENZOATE is offered by dealers at about 3s. 9d. per lb.

ASPIRIN.—A fair volume of business continues to be done on spot, and dealers are still asking about 3s. 7d. to 3s. 9d. per lb. for good brands, according to quantity. For the time being a break in this market is not looked for.

BARBITONE is still dull; dealers quote in the region of 17s. to 18s. per lb.

BENZALDEHYDE (.03) remains steady on a quiet market at about 3s. 5d. to 3s. 6d. per lb.

BENZOIC ACID (B.P.).—It is understood that import licences for fair quantities are now to be granted, and the position on spot is therefore likely to become easier. The price is at present nominal at about 3s. 9d. per lb. for B.P., practically nothing being available. Commercial of poor quality is 2s. 6d.

BETANAPHTHOL.—Supplies are scarce at 5s. 6d. per lb., with some dealers quoting more.

BROMIDES.—Business continues, although it has not been quite so brisk. Prices for spot are fairly steady and show little change on the week. Ammonium, about 9d. per lb.; potassium, crystals and granular, about 8d. per lb.; sodium, crystals and granular, about 9d. per lb., all B.P.

CALCIUM LACTATE appears to be steadier after the recent big drop in spot values to 1s. 11d. to 2s. per lb., according to quantity.

CHLORAL HYDRATE seems of little interest at between 4s. to 4s. 3d. per lb. for duty paid crystals.

CITRIC ACID (B.P. crystals).—Although the demand remains practically nil, the spot value seems steadier at 1s. 4½d. per lb., less 5 per cent.

CREOSOTE, B.P.—Dealers are now asking slightly less by quoting in the region of 2s. 5d. per lb.; business remains quiet.

CREOSOTE CARBONATE is nominal on a lifeless market at about 6s. 6d. per lb.

GUAIACOL CARBONATE is very quiet and easier at 13s. per lb.

HEXAMINE is steadier after last week's much cheaper rates for spot supplies. The demand, however, is still slow, at 3s. 9d. to 4s. per lb., according to quantity.

HYDROQUINONE continues irregular on quotation for spot supplies—the demand is not good; quoted close up to 4s. per lb.

METHYL SALICYLATE is steady as offered at about 2s. 10d. to 3s. per lb., and a fair volume of inquiry is on the market.

METHYL SULPHONAL is seldom called for, at about 21s. to 22s. per lb. The market seems likely to decline.

PARAFORMALDEHYDE is a firm item, and there has been a continuance of business in the region of 3s. 6d. to 3s. 9d. per lb.

PARALDEHYDE is much slower in demand, and the spot prices as mentioned at 1s. 7d. to 1s. 7½d. per lb. are maintained with difficulty.

PHENACETIN.—The spot position holds fairly steady at 7s. 3d. to 7s. 6d. per lb., but the demand has not been so good of late.

PHENAZONE is varying on offer on spot at from 8s. to 8s. 3d. per lb. Business has been much quieter, and the market is weaker.

PHENOLPHTHALEIN is steady, with spot supplies limited; quoted at 8s. to 8s. 3d. per lb.

POTASSIUM PERMANGANATE (B.P.).—So far as merchants are concerned, who are quoting in the region of 9½d. per lb., there is very little doing.

POTASSIUM SULPHOGUAICOLATE is nominal at 6s. to 6s. 6d. per lb. with no inquiry.

RESORCIN is steady at 6s. to 6s. 3d. per lb.

SALICYLIC ACID has been in occasional demand at from 2s. 4d. to 2s. 5d. per lb., according to quantity. The market is fairly steady at these easier rates.

SALOL.—Prices vary here, with some offers as high as 4s. 3d. per lb. Other prices are said to be down to 3s. 9d. Business is small.

SILVER NITRATE.—The price of crystals on January 23 was based on a metal price of 35½d. per oz. as follows:—In quantities of 25 oz., 2s. 2½d. per oz.; 50 oz., 2s. 1½d.; 100 oz., 2s. 1½d.; 250 oz., 2s. 0½d.; 500 oz., 2s. 0½d.

SODIUM BENZOATE.—This item is likely to move to easier prices in the near future, as imports of benzoic acid will improve as licences are said to have been granted. Stocks are still small, and 3s. 3d. per lb. is quoted.

SODIUM DIETHYLBARBITURATE remains very dull and nominal as quoted in the region of 18s. 6d. per lb.

SODIUM SALICYLATE has cheapened on spot and the market is still rather unsteady. Powder, about 2s. 10½d. to 2s. 11d.; crystals, about 3s. per lb. Business has been quieter during the past week.

SULPHONAL is nominal on a stagnant market; quoted at about 18s. to 19s. per lb.

TARTARIC ACID, B.P. crystals.—Spot offers are still at about 1s. 1d. to 1s. 1½d. per lb., less 5 per cent. for good quantities, and there is little doing. The tone, however, is somewhat steadier.

TERPIN HYDRATE remains steady on a quiet market at 1s. 9d. per lb.

The following average prices are quoted by British makers: Camphoric acid, 20s. to 18s. per lb. Bismuth salts: Carbonate, 14s. 9d. to 12s. 9d.; subnitrate, 12s. 9d. to 10s. 9d.; citrate, 13s. 4d. to 11s. 4d.; salicylate, 12s. 2d. to 10s. 2d.; cadmium sulphate, 4s. 6d. to 4s. 3d.; ether, s.g. 0.720, 1s. 6½d. to 1s. 2½d.; purif. ex S.V.M., 2s. 2d. to 1s. 10d. per lb.; iron ammon. citrate, B.P., 2s. 3d. to 1s. 11d.; iron ammon. citrate, U.S.P., 2s. to 1s. 8d.; iron ammon. citrate, green, 3s. to 2s. 6d. per lb. Mercurials: Red oxide, 5s. 1d. to 4s. 11d. per lb.; corrosive sublimate, 3s. 10d. to 3s. 8d.; white precipitate, 4s. 8d. to 4s. 6d.; calomel, 4s. 3d. to 4s. 1d.; phosphoric acid, s.g. 1.750, 1s. to 11d. per lb.; potass. acetate, 1s. 3d. to 1s. per lb. Potash citrate, 2s. to 1s. 8d.; sodium citrate, B.P.C., 1s. 9d. to 1s. 5d.; sodium citrate, U.S.P., 2s. to 1s. 8d.; sodium nitro-prusside, 16s. per lb.; sodium sulphide, pure recryst., 1s. 2d. to 10d.; terebene, 2s. 8d. to 2s. 6d. per lb.

Industrial Chemicals, etc.

London, January 23.

BUSINESS has been quiet during the past week, but the tone of the market keeps fairly steady. Prices in some instances are rather easier. The railway strike is likely to have the effect of postponing any improvement in demand for the time being.

ACETIC ACID is rather firmer on account of the extra import charges importers now have to pay on German material. The demand has been limited. 80 per cent. technical, £47; 80 per cent. pure, £50; 98 per cent. glacial, £73 per ton, in glass demijohns, ex wharf, London.

ACETONE is quiet, with dealers' prices on spot steady at £123 per ton for B.G.S.

AMMONIA ALKALI (58 per cent. light alkali) from British makers for home trade only is steady at £6 15s. per ton, in bags, free, carriage paid to any station in Great Britain. Makers' prices for export vary according to destination.

ARSENIC.—There is an American demand again reported for Cornish, which is generally firmly held, as much as £70 having been asked in one quarter, delivered London; but quotations may be called £68 to £69. Recently business was done down to £65 10s. at the mines, f.o.r., but the nearest figure based on f.o.r. terms is now more like £66. The demand looks like continuing in excess of the supply. Grecian sellers are said to be asking upward of £67 c.i.f.

BARIUM CHLORIDE is dull, with dealers offering Continental (98 to 100 per cent.) at about £14 10s. to £14 15s. per ton.

BLEACHING POWDER is seldom called for; dealers are offering for shipment from the Continent 35 to 37 per cent. chlorine at about £10 to £10 10s. per ton.

COPPER-SULPHATE is virtually unchanged, and it is claimed that orders could still be arranged down to £25 f.o.b. for casks, but £25 10s. would seem to be a fair quotation, despite the comparatively restricted export demand.

CREAM OF TARTAR is steady, with a limited volume of business at about 84s. per cwt. less 2½ per cent. for one-ton lots.

EPSOM SALTS is much dearer, but prices of dealers are of little interest to buyers in the home market, being at about £6 per ton, in bags, which is well above British makers' price.

FORMALDEHYDE is maintained in spot value, but inquiry is not active; quoted at about £63 per ton for 40 per cent. volume.

GLAUBER'S SALT.—Commercial quality of imported is dearer at about £4 to £4 10s. per ton, in bags. British material is cheaper.

LEAD ACETATE is well held with spot supplies scarce and Continental offerings dear. Brown, £44 10s.; white, £45 10s. per ton.

POTASH CAUSTIC.—Spot supplies are by no means large, and with fresh imports dear, the price quoted by holders is firm at £32 to £32 10s. per ton for 93 to 92 per cent. solid, in drums.

POTASSIUM CARBONATE is steady on spot, but not meeting with much demand. Holders' prices seem steady: 90 to 92 per cent., £25; 96 to 98 per cent., £25 15s. to £27 10s. per ton.

POTASSIUM CHLORATE for forward delivery is quoted in big quantities at 2½d. to 3d. per lb.

POTASSIUM PERMANGANATE of commercial quality remains of little interest as quoted in the region of 9d. per lb.

POTASSIUM PRUSSIATE is again at cheaper rates. British offering at a shade under 9½d. per lb. for yellow in fair quantity. The demand remains poor.

SODA CAUSTIC.—Dealers' lower prices quoted last week remain in force: 70 to 72 per cent., £15 10s.; 76 to 77 per cent., £17 10s. per ton, in drums, ex wharf, shipping port. British makers' prices are unchanged to domestic consumers on contract at 70 to 72 per cent., £17 17s. 6d.; 76 to 77 per cent., £19 7s. 6d. per ton, in drums, carriage paid to any station in Great Britain. Their prices for export vary according to destination. An action contesting the right of gas companies to manufacture caustic soda was dismissed in the High Court of Justice last week (p. 115).

SODA CRYSTALS (carbonate) for home consumers only from British makers are steady at £5 5s. per ton, in bags free, carriage paid to destination.

SODIUM ACETATE is offering on spot in small lots at about £23 10s. to £24 per ton, with occasional inquiry.

SODIUM BICHROMATE, for home trade, from British makers, is 4d. per lb.

SODIUM HYPOSULPHITE.—Pea crystals, on spot, are steady up to £16 per ton, in 1 ewt. kegs. Commercial quality is at about £10 per ton, in casks. Business has been limited.

SODIUM PRUSSIATE remains very flat, and dealers offering British at about 5½d. per lb. The actual selling price for good quantities might be a shade less.

SODIUM SULPHIDE is unchanged, holders finding business slow: 60 to 62 per cent. solid, £15; ditto, broken, £15 10s. per ton, in drums.

SODIUM SULPHITE.—Pea crystals are cheaper at £15 per ton.

COAL TAR PRODUCTS, ETC.—A number of alterations are recorded in prices, chief amongst which is a further fall in the price of pitch; this item is still weak. Business generally remains on the slow side, and the tone of the market is inclined to be unsteady. ANILINE OIL remains dull, with the selling price below the quoted rate of British makers at 8½d. per lb. ANILINE SALT is mentioned by British makers, naked, ex works, at 9d. per lb., but the few sales would be well under this figure. BETANAPHTHOL shows but little life: quoted at about 1s. 1d. per lb. BENZOL as offered by British is at cheaper rates this week: crude 65's, 8d. to 10d.; standard motor, 1s. 1d. to 1s. 2d.; pure, 1s. 4½d. to 1s. 7d. per gallon, ex works, in tank wagons. TOLUOL, pure, 1s. 9d.; 90's, 1s. 3d. to 1s. 4d. per gallon; British makers are quoting at these rates. XYLOL is freely offered at about 2s. 3d. per gallon for pure, with little business doing. CREOSOTE OIL has advanced sharply after a period of much better business, and the market is now firm at about 11½d. per gallon, f.o.b. CARBOLIC ACID crystals remain dull, with the price still at the lower level of 8½d. per lb., in large bulk packing. CRESYLIC ACID is rather cheaper, with 97 to 99 per cent. quoted at 1s. 1d. to 2s. 1d. per gallon. Business has been fair. NAPHTHALENE is steady, but in no great demand. Dealers are quoting at about £18 per ton for crystals and flaked. PYRIDIN shows a further slight reduction in price to 16s. to 17s. per gallon. HEXAMETHYLENE is steady, with dealers quoting at 4s. per gallon. Pure METHYL ALCOHOL from dealers holding spot supplies is quoted at £80 per ton, in drums, ex wharf, London. PITCH remains exceedingly flat, with practically

no business done. The spot quotation has again fallen and is now 82s. 6d. per ton, f.o.b. East Coast. The tone is very nervous. WOOD TAR is steady but quiet at £4 15s. to £5 per ton, according to quality.

Fixed Oils, etc.

BUSINESS in this market has possibly not been so good of late, but some products maintain their firm tone, notably palm, castor, groundnut, and rape oils. Linseed oil has had a good week. American turpentine continues to move to higher prices. The railway strike is bound to have a bad effect on business in these items. ACID OILS.—Spot values are about the same, with the market steady. The high prices ruling prevent much business. COCONUT and palm kernel, 42s.; groundnut, 39s.; soya, 37s. 6d., all spot. CASTOR keeps firm with prices fully maintained. PHARMACEUTICAL, 65s.; first pressings, 60s.; second pressings, 59s., spot to March, in not less than one-ton lots, in barrels. COCONUT has been inactive and unchanged all the week: deodorised, on spot, 53s.; Ceylon, 48s. 6d., c.i.f.; Cochin, 60s., c.i.f. CORTON.—Prices for some grades are a point lower this week, but at the close the market was firm after a week of fair business: deodorised, 53s.; common edible, 52s.; soapmaking, 48s.; crude, 44s., all spot. GROUNDNUT.—The firm tone recently recorded continues, with prices unchanged: deodorised, on spot, 61s.; crude Oriental, 55s., c.i.f. LINSEED (raw, naked).—A fairly steady tone has governed this market during the past week, with the tendency for prices of forward positions to harden. On spot, 45s.; January, 43s.; February, 41s. 3d.; March-April, 39s. 4½d.; May-August, 38s.; Hull, on spot, 44s.; January, 43s. 3d.; February, 41s.; March April, 38s. 7½d.; May-August, 37s. 7½d. PALM KERNEL.—Prices show up rather easier this week and the market has been quiet throughout: deodorised, 51s. 6d.; crude, about 45s., all spot. PALM.—Business continues quite satisfactory, and it has been difficult to meet all inquiries. Prices are again showing slight advances for some grades, and the market is firm throughout. Lagos, 40s. 9d.; softs, 40s.; mediums, 39s. 6d.; hards, 39s. 9d.; bleached, 43s. 6d., all spot. RAPE.—The advance in prices continues here, with the market firm: refined, 50s.; crude, 47s. 6d., spot. SOYA.—The higher prices quoted last week are fully maintained; market closed firm: deodorised, 50s.; crude, 45s., all spot. TURPENTINE.—The tendency of the market for American spirit has derived additional strength from the trend of American cables, the recent sharp rise at Savannah having been maintained. Market closes on spot at 78s. 6d. per ewt.; February-April, 79s. WOOD.—Hankow in barrels on spot is again dearer and stands firm at 95s. 6d., and January-February at 100s.

LUBRICATING, MINERAL AND BURNING OILS, ETC.—There is little actual change in the spot position, but the further fall in the value of sterling on the American exchange seems likely to have a stiffening effect on prices. BENZOL.—British makers notify reductions in their prices: crude 65's, 8d. to 10d.; standard motor, 1s. 1d. to 1s. 2d.; pure, 1s. 4½d. to 1s. 7d. per gallon, in tank wagons, ex works. BURNING OILS.—Crude No. 3, 8½d.; No. 2, 8d. per gallon, barrels free. This market remains at the old level. FUEL OIL is fully maintained at higher rates: 89s to 910 gravity, £4 7s. 6d.; 950 gravity, £3 12s. 6d. per ton, ex tank. PARAFFIN WAX and SCALE.—Wax is now very firm with supplies short: 2½d. to 4½d. per lb., in bags, according to melting point. Scale is also firm at about 2½d. per lb., e.i.f. U.K. port. SOLVENT NAPHTHAS are somewhat steadier and have been in better demand at about 1s. 1d. per gallon for 90 to 160 and 90 to 190. PARAFFIN OILS.—Spot position firm and tending to advance. American standard white, 11d.; water white, 1s. per gallon, barrels free; Russian prime white kerosene, 6d. to 6½d., ex tank: 6½d. buyers' barrels, filled free: 9d. barrels free, ex wharf, London. PARAFFIN JELLIES.—Last week's higher prices are maintained; snow white, £56 to £65; amber and yellow, £21 to £27; red vet, £19; ruby red, £20 10s.; dark stiff green, £14 17s. 6d., ex wharf, London. WHITE OILS.—Spot prices are firm and advances are expected. Special No. 1, £44; No. 1, £38; No. 3 half-white, £50 per ton, drums free; No. 2, £26 10s., barrels free, ex wharf, London. LUBRICATING OILS.—The continued fall in value of sterling on the American exchange seems likely to affect spot prices, which are now firm: pales, £10 to £24 10s.; reds, £13 to £22 10s.; dark cylinders, £14 10s. to £27 10s.; filtered cylinders, £19 5s. to £34 5s.; blacks, £7 17s. 6d. to £15 15s., ex wharf, London, less 2½ per cent. Soluble oil, £19 to £25 per ton, net. No. 1 RUSSIAN OIL is offered at £17 per ton, less 2½ per cent., ex wharf, London, and continues in good demand.

London Drug Auctions

Commercial Sale Rooms,
Mincing Lane, E.C.3. January 24.

OWING to the railwaymen's strike, which, apart from the dislocation of business, has occasioned considerable discomfort and annoyance to City people, the public auction commenced an hour later (11.30 a.m.), when there was a fair attendance. Although an interval of nine weeks had elapsed since the previous auction, a moderate supply only was offered by ten brokers. On the whole, the demand showed a decided improvement, but prices of a number of miscellaneous drugs went in favour of buyers. Cape aloes proved flat and nothing sold. Sumatra benzoin met with a fair demand at easier rates. Cardamoms sold freely at higher prices. Dragons' blood was neglected, but good quality was not offered. Gamboge is easier inclined and plentiful. Jamaica honey was a feature of the sale, a further 2s. 6d. to 3s. per cwt. advance being paid on private prices. Matto Grosso ipecacuanha sold at the advanced rates paid privately and was in excellent demand. Myrrh was neglected, and rhubarb was slow of sale, flat high dried being rather cheaper. Both grey Jamaica and native sarsaparilla being offered in large quantity, buyers held off and little public business was done. Timnevelly senna was neglected, but pods were dearer. Jamaica bees' wax was also higher, but other descriptions were neglected. Cassia fistula was decidedly cheap. The following table shows the quantities of goods offered and sold :—

	Offered	Sold		Offered	Sold
Ajowan seed	.. 99 ..	9	Honey—		
Aloes—			Calif	.. 40 ..	0
Cape	.. 93 ..	1	Chilian	.. 76 ..	25*
Zanzibar	.. 13 ..	0	Jamaica	.. 652 ..	478
Ammoniacum (es.)	48 ..	0	New Zealand	.. 162 ..	20*
Anise (Russ.)	.. 50 ..	0	Ipecacuanha—		
Anise (Span.)	.. 37 ..	0	Matto Grosso	.. 25 ..	22
Annatto seed	.. 32 ..	0	Jaborandi leaves	.. 58 ..	0
Areca	.. 67 ..	0	Jalap	.. 5 ..	0
Asafetida	.. 178 ..	0	Kamala	.. 11 ..	0
Balsam tolu	.. 12 ..	0	Kino (Afr.)	.. 30 ..	0
Bay leaves	.. 14 ..	0	Kola	.. 153 ..	3
Benzoin—			Lanrel berries	.. 5 ..	0
Siam	.. 36 ..	0	Lavender oil (tins)	.. 24 ..	11
Sumatra	.. 249 ..	27	Lime juice (pns)	.. 5 ..	0
Buchu	.. 37 ..	1*	Liquorice root	.. 35 ..	15
Calamus root	.. 12 ..	0	Marjoram	.. 4 ..	0
Calumba	.. 320 ..	0	Matico	.. 43 ..	0
Cannab. Ind.—			Myrrh	.. 115 ..	6
African	.. 29 ..	5	Nux vomica	.. 199 ..	0
Bombay	.. 1 ..	0	Oak bark pdr.	.. 4 ..	0
Cantharides	.. 13 ..	0	Olibanum	.. 192 ..	0
Cardamoms	.. 145 ..	57	Orange oil (tins)	.. 100 ..	0
Cascarilla	.. 3 ..	0	Orange peel	.. 62 ..	2
Cassia fistula	.. 135 ..	28	Orris (Flor.)	.. 30 ..	0
Chillies	.. 120 ..	0	Otto of rose (vs.)	.. 4 ..	0
Chiretta	.. 5 ..	1	Patchouli oil (dms.)	.. 10 ..	0
Cinchona	.. 8 ..	8	Quillaja	.. 50 ..	0
Civet (hrns)	.. 1 ..	0	Quince seed	.. 3 ..	3
Coeculus indicus	.. 21 ..	0	Rhapontica root	.. 40 ..	0
Colocynth pulp	.. 85 ..	0	Rhatayu	.. 24 ..	0
Copaiba balsam	.. 23 ..	0	Rhubarb (Ch.)	.. 113 ..	12
Coriander seed	.. 292 ..	0	Rhus aromaticeus	.. 4 ..	0
Cubeb	.. 34 ..	0	Salep	.. 2 ..	0
Cumin seed	.. 328 ..	256	Sandalwood chips	.. 64 ..	0
Cuseus	.. 41 ..	0	Sarsaparilla—		
Cuttlefish bone	.. 59 ..	4	Grey Jamaica	.. 52 ..	11
Dragon's blood	.. 63 ..	0	Guayaquil	.. 3 ..	0
Egg yolk	.. 4 ..	9	Lima-Jamaica	.. 19 ..	4
Elemi .. (es.)	.. 78 ..	4	Mexican	.. 10 ..	0
Ergot	.. 53 ..	16	Native Jam	.. 27 ..	0
Essential oils (ebs.)	.. 8 ..	8	Seamony (es.)	.. 1 ..	0
Eucalyptus oil	.. 15 ..	0	Senega	.. 4 ..	0
Euphorbia pil.	.. 40 ..	0	Senna and pods—		
Fennel oil (dms.)	.. 8 ..	0	Alex.	.. 171 ..	0
Fennel seed	.. 9 ..	0	Timnevelly	.. 319 ..	19
Galbanum (tins)	.. 3 ..	0	Squill	.. 57 ..	0
Galangal	.. 40 ..	0	Tamarinds (W.L.)	.. 72 ..	10*
Galls	.. 17 ..	0	Tonka beans	.. 19 ..	0
Gamboge	.. 43 ..	2	Turmeric	.. 240 ..	0
Gingergrass oil (pots)	.. 3 ..	0	Wax (bees)—		
Guaiacum	.. 24 ..	0	Chilian	.. 14 ..	0
Gum acacia	.. 150 ..	0	East African	.. 71 ..	7
Gum yacca	.. 40 ..	0	East Indian	.. 11 ..	0
Gurjun oil (dms.)	.. 60 ..	0	Jamaica	.. 9 ..	10
Henbane	.. 6 ..	0	West Indian	.. 5 ..	1
Henna leaves	.. 171 ..	0	Wax, veg., Jap.	.. 25 ..	0
			Witch hazel bark	.. 5 ..	0

* Sold privately.

ALOES was quite neglected. Cape, of which a representative quantity offered, was held at 4s. 6d. for good, hard bright firsts, and at 40s. for good seconds. Of Zanzibar, seven cases offered and bought in at £9 10s. for mostly good, hard hepatic, but rather skinny. Privately, good Zanzibar in skins are quoted at from £9 to £9 10s., and in kegs at from £7 to £7 10s. per cwt.

ANNATTO SEED.—Three bags fair red Jamaica offered, and bought in at 1s. 5d. per lb. A further lot of 28 bags fair East Indian offered, for which 1s. 4d. per lb. was wanted.

BENZONI.—Seven cases Sumatra sold cheaply, including fair almond seconds at £8 and country-cut ditto at £7 10s. per cwt. Middling seconds (15 cases) sold at £6 10s. to £7, and good barky thirds went at 90s. per cwt. Eight cases of good Sumatra seconds, well packed with small almonds and of strong storax aroma, were held at £10 10s., a bid of £10 5s. being refused for part.

BUCHU was slow of sale, no business being done in auction. Seven bales of fair round slightly stalky leaf offered and were held for 2s. 1d. per lb., and in another instance 9 bales of bronzy and dull stalky round were bought in at 2s. 9d. Good green long was held at 2s. 9d., and stalky at 2s. 8d. per lb.

CALUMBA.—A parcel of 20 bags good small to bold yellow washed was held at 40s. per cwt.

CANNABIS INDICA.—A single case of fair Bombay tops all that offered, and said to be the last case in first hands, was held at 19s. 6d. per lb.; 19 bags African siftings were limited at 3s. 6d. per lb. Towards the close of the auction 5 bags loose African sold at 3s. 6d. per lb.

CANTHARIDES.—Ten cases fair Chinese were held at 4s. 6d. per lb., at which sales have been made privately.

CARDAMOMS met with a good demand at higher rates, the sales comprising : Ceylon-Mysore, medium to bold good pale, 6s. 10d.; small to medium pale, 6s. 4d. to 6s. 5d.; small to medium dullish, 5s. 3d. to 5s. 8d.; tiny pale, part split, 5s.; bold pale split, 6s. 4d.; small split, 5s. 10d.; small dull split, 4s. 9d.; small to medium unbleached Indian, 5s. 9d.; Ceylon-Malabar (5 cases) medium palish, 5s. 5d. per lb.

CASCARILLA.—Three barrels of siftings were bought in at 1s. 4d. per lb.

CASSIA FISTULA was in plentiful supply, the offerings including 41 packages, of which 11 bags good pod sold cheaply at 32s. 6d. per cwt. A further 17 bags of very fair, sound Dominica also went cheaply at 30s. per cwt.

CINCHONA.—Five bales Succirubra chips (1.91 per cent. quinine, 1.33 per cent. cinchonidine, 7.84 per cent. total alkaloids) sold at 1s. 1d. per lb.

COLOCYNTH.—A lot of 55 bales of fair pale pulped Sudan offered, and held at 1s. per lb., and five bales of yellowish pulped realised 10d. per lb. Privately fair broken Syrian apple is held for 1s. 2d., and whole apple at 1s. 8d. per lb.

CUMIN SEED.—A parcel of 256 bags, fair, clean Morocco sold at 110s. for sound, and at from 102s. 6d. to 107s. 6d. for sea-damaged. A bid of 112s. 6d. was refused for 72 bags Maltese.

CUTTLE FISH BONE.—Four cases common broken small East Indian sorts offered, and sold at 1d. per lb. Privately, good quality is scarce, bold pale being held at 1s. 2d. to 1s. 3d.

DRAGON'S BLOOD was in more plentiful supply, but no public business was done. The offerings included 14 cases dull Singapore lump, which were bought in at £8 5s. per cwt.; sales of this quality have been made privately at £8. The "Devanha" has brought 19 cases from Singapore. A lot of 20 eases ready on show at Mark Brown's wharf was offered, but not being ready they will be offered at the brokers' sale-room later.

ELEMI.—A lot of 28 cases, mostly good pale paste, offered, of which four cases sold at 50s. per cwt.

ERGOT.—A lot of 15 bags Spanish, sold without reserve, at from 8d. to 9d. per lb. for very wormy to slightly wormy. At the close of the sale a bag of apparently sound sold at 11½d. without reserve.

ESSENTIAL OILS.—Under this name eight carboys (about half a ton altogether) sold at 7d. per lb., the final carboy going at 5s. 9d. per lb., all without reserve. The goods were sold "according to sample," and apparently consisted of a camphoraceous oil of good gravity.

EUCALYPTUS OIL.—Ten cases B.P. (74 per cent. cineol) were offered and held at 2s. 3d., and five cases (83 per cent. cineol) also at the same figure.

FENNEL OIL.—Five drums Spanish offered, but no bid was made, and the actual price did not transpire. Parry's analysis showed it to be a pure oil with an anethol content of approximately 55 per cent.

GAMBOGIE.—A plentiful supply offered, of which two cases sold at £19 per cwt. for fair slightly blocky Siam pipe of mostly orange fracture.

GURJUN BALSAM.—A lot of 60 drums was offered, and held for 10d. per lb.

HENNA LEAVES.—A lot of 78 bags small part stalky was limited at 65s. per cwt.

HONEY met with a good demand owing to the large business, in the lower grades, for the Continent, which had

been done privately between the auction. Prices during the auction interval had been advanced from 5s. to 7s. 6d. per cwt., and a further 2s. to 3s. advance was paid to-day. Of Jamaica 650 offered, 500 sold, including white set at 60s., cream set 58s. to 60s., pale set 50s. to 57s. 6d., biscuit set 45s. to 50s., amber liquid 43s. to 50s., dark liquid 43s. to 45s., brown sugary set 40s. to 42s. 6d., and very dark slightly sugary 39s. to 42s. 6d. No California sold, 70s. being wanted for good liquid amber, and white set 42s. 6d. Of Chilian, 76 kegs offered, of which 26 sold privately, and the balance held for 45s. to 50s. Of New Zealand, 162 packages offered, and 20 sold privately, the balance being held for 55s.

IPÉCACUANHA.—There was an excellent demand, 22 bales Matto Grosso selling at 8s. per lb. for mostly fair lean sound, also slightly water-damaged at 8s.; ordinary lean 7s. 5d., and badly damaged 7s. 1d. per lb. Privately sellers of Matto Grosso have been asking 8s. per lb., and prices are expected to advance further, as exporters say present prices do not pay.

KAMALA.—Four cases of triple sifted from Bombay were limited at 2s. 6d. per lb.

KINO.—A lot of 30 cases small dusty African was limited at 2s. per lb.

KOLA.—Two bags of broken mixed West Indian sold at 2d., and a single bag fair washed went at 2½d. A lot of 70 bags African quarters from Hamburg was offered and held at 2½d. per lb.

LAVENDER OIL.—A parcel of 11 tins Spanish, containing 8.4 per cent. esters, sold at 3s. 6d. per lb., and 13 tins ditto, containing 20 per cent. esters, were held for 8s. 9d. per lb.

LIQUORICE ROOT.—A lot of 14 bales common natural offered and sold without reserve at from 14s. to 15s. per cwt., and a further 20 bales decorticated were limited at 62s. 6d. per cwt.

MYRRH.—Six bales of dark siftings sold without reserve at 55s. per cwt. For good fair Aden sorts part blocky £6 10s. per cwt. was wanted.

NUX VOMICA.—A lot of 169 bags fair Bombay was retired at 17s. 6d. per cwt.

ORANGE OIL.—A lot of 100 tins sweet Spanish offered, guaranteed to be a pure oil with no added fatty matter, according to Parry's analysis; the price named was 8s. 6d. per lb.

ORANGE PEEL.—A small sale of broken old crop, and slightly off colour, sold at 6d. per lb.; 8d. to 9d. is wanted for fair bright new Tripoli crop.

ORRIS.—A lot of 30 bags fair pale Florentine sorts offered and bought in at 32s. 6d.

PATCHOULI OIL.—Ten drums Singapore distilled were offered and held at 22s. 6d. per lb.

QUILLAIA.—Fifty bales cut offered and were bought in at 42s. 6d. per cwt.

QUINCE SEED.—Three bags middling Cape offered and sold at 2s. 9d. per lb.

RHUBARB. met with a slow sale at steady prices, the sales including a case of medium round Shensi, with three-quarters fair pinky fracture, at 3s. 6d., and a case of wild Shensi pickings at 1s. 7d. per lb. Good medium to bold Shensi was bought in at 3s. 9d., medium to bold flat Canton, with two-thirds fair pinky fracture, at 3s. to 3s. 3d. Of High-dried, eight cases sold, comprising two cases good medium flat, with three-quarters fair pinky fracture, at 2s. 6d. per lb., and six cases small to bold, round, rough, horny High-dried, with three-quarters fair fracture, and one-quarter dark, at 1s. 7d. per lb., being cheap.

SARSAPARILLA.—Owing to the large quantity of grey Jamaica offered, buyers' ideas of value were several pence below importers' limit, and little public business was done. Holders asked 2s. 3d. per lb., and bids of 2s. and 2s. 1d. were refused. Towards the close 11 bales grey Jamaica sold at 2s. to 2s. 2d. for fair and 1s. 9d. to 1s. 10d. for part mouldy and water-damaged. Native Jamaica was plentiful, but buyers held off. Good red was obtainable at 1s. 9d. to 1s. 10d. per lb., and inferior no colour at 1s. 8d., but no counter-bids were made. Four bales fair Lima-Jamaica sold at 1s. 9d. per lb., being the valuation.

SENEGA.—Four bales of fair were retired at 3s. 2d. per lb.

SENNA. met a slow sale, 3d. per lb. being paid for middling greenish small to medium Tinnevelly leaf. Darkish to fair Tinnevelly pods (8 bags) sold at 4½d. to 5½d. per lb., being dearer.

SQUILL.—A lot of 42 bales, mostly good pale, offered and were bought in at 23s. 6d. per cwt.

TONKA BEANS.—A lot of 13 cases fair black Para, a few foxy and broken, offered and were held at 1s. 6d. per lb.

Five casks good frosted Angostura were catalogued and held at 7s. per lb., at which business has been done privately.

TURMERIC.—A lot of 220 bags fair split Cochin bulb offered and were held at 22s. 6d. per cwt. Twenty bags of guaranteed genuine powder, ground in London, were held at 50s. per cwt.

WAX, BEES'.—Jamaica was rather dearer, nine packages fair block, mixed colours, selling at £7 15s. per cwt. Three cases dark grey and brown St. Lucia were held at £6 5s. per cwt., and a barrel of fair brown West Indian sold at £7 15s. per cwt. Of Chilian, 14 bags fair block offered and held at £6 10s. Good bleached Calcutta (6 cases) were held for £8 5s. per cwt., and dull bleached (5 cases) at £7 10s. Fine bleached East African shipped from Dar-es-Salaam was held at £6, and 3 cases brown block ditto sold at £5 per cwt.

WAX (VEGETABLE).—Twenty-five cases (Chikusan brand) were offered at 95s. per cwt.

Cinchona in Burma

The Report of the Botanical Survey of India for 1922-23 records interesting progress in the cultivation of cinchona in Burma, in spite of the necessity of retrenchment due to the limitation of funds; 250 acres only were planted instead of 500 acres, but the new situation in the vicinity of Tenasserim, so far, seems admirably adapted to the plants. The plants are described as having made phenomenal growth, whilst, in the process of hardening the seedlings to the sun, "methods which have never been deemed possible in Bengal have been successfully employed in Burma." One of the most interesting points is that the plants grown in unfavourable conditions at the earlier Burma experimental station at Tavoy provided sufficient bark to enable the alkaloid contents to be estimated. In spite of adverse climatic conditions under which these plants at Tavoy have been grown, at two years of age the bark showed an alkaloid content of 4 per cent., and at one year old of between 2 per cent. and 3 per cent., percentages obtained in Bengal only from trees of from four to seven years old.

Singapore Patchouli Figures

DURING the first seven months of 1923 exports of patchouli oil amounted to 203,116 Straits dollars. The principal importing countries, and the respective values of shipments, were: England, 55,000 dols.; Japan, 49,540 dols.; and the United States, 37,840 dols. The average production of oil is from 2,000 lb. to 3,000 lb. per month, and the market price is approximately nine Straits dollars a pound. The export of patchouli leaves is of importance. Ninety per cent. grow in the interior of the northern part of Sumatra, and 10 per cent. on the island of Singapore and in the State of Johore. The leaves are pressed into bales of 280 lb. and are shipped to Singapore, which in 1922 received 10,853 piculs (1 picul = 133½ lb.). Of this, 4,016 piculs were used for oil production, and 6,837 piculs were exported during the year. For the first seven months of 1923 Singapore's imports of patchouli leaves totalled 14,541 piculs, of which 7,177 piculs were exported. The three oil distillers in Singapore are Chinese firms, and the oil is exported in 20-lb. iron drums, packed two to a case.

Cinchona and Quinine in 1923

MR. W. BREDT, 10 Fenchurch Avenue, London, E.C.3, has issued his annual report on bark and quinine, in the course of which he gives an interesting summary of the principal features of what proved an uneventful year. He states: "The official price remained at 2s. 3d. per oz. throughout; no move has thus been made to render competition more difficult for the Hoshi Quinine Works, which continues to sell its production under Convention prices in Europe and America, and has, moreover, combined with the Kyodo Pharmaceutical Co., with the avowed object of extending the manufacture of cinchona products. Hitherto Hoshi has drawn its bark supplies from the Sadarehe estate, said to furnish about 10 per cent. of the Java output; whether Japan has the promise of the bark from other plantations in the Dutch Indies, wherewith to augment its production of quinine, is not known here. Attempts to induce the Sadarehe estate to come into the ring have failed. In regard to the future of quinine, prices to a large extent appear to depend on Japanese developments. Dealers naturally confine their purchases to the cheaper Japanese product; the rest of the business is in the hands of the quondam members of the defunct British Quinine Corporation."



Letters for this section should be written on one side of the paper only. Correspondents may adopt an assumed name for purposes of publication, but must in all cases furnish their real name and address to the Editor.

Botanical Plates

SIR,—May I offer you my very hearty congratulations upon the coloured plates of medicinal plants you have given with your issue of January 12? The articles on pharmaceutical botany must have proved invaluable to pharmaceutical students in all parts of the world, and now your paper has excelled itself in giving free copies of these coloured plates. Whilst I have in the department a large number of plates of medicinal plants, many from old herbaria, there are few which give the fine colour value seen in your poppy plate. The earliest plate I have is a copper plate of (*Melia Azedarach*, and pencilled on the margin is "Burmann Thes. Zeyl. 1757.") The best coloured ones are from the "Flora Danica," dated 1796 or thereabouts, some in black and white and some hand-coloured. Of the later ones there is a series published by Lehm & Fink, New York, two of which I enclose; this series was never continued, as far as I know. If any of your readers can tell me anything about the origin or author of "Flora Danica" I shall be glad.—Yours sincerely,

PROSPER H. MARSDEN.

University of Liverpool.

The Qualifying Examination Certificate

SIR,—I was interested to read the "sarcastic comment" of "Xrayser II" on the certificate that is handed to successful candidates after they have passed their Qualifying examination. I agree that the Pharmaceutical Society ought to give something better, and with that object in view, at a recent meeting of the Pharmaceutical Council, I gave notice of motion that "A more distinguished-looking certificate be granted to those persons who passed the Qualifying examination." This was referred to the Education Committee; after discussion, a majority voted in favour of my motion, and this was afterwards confirmed by the Council. So I am pleased to inform you that the Pharmaceutical Society are now pledged to give "A more distinguished-looking certificate" to those persons who qualify.

Yours faithfully,
THOMAS MARNS.

Ealing, London, W.5.

Retail Price Lists

SIR,—Messrs. Hague and Carr (*C. & D.*, January 19, p. 106) appear to be perturbed over the idea that publication of a price list by a trade union connotes some attempt at ensuring uniformity; if it does not the reason for publication fails. But, does the trade union issue a price list? I think not, and that is where "Xrayser II" went wrong. The so-called official list is simply an old form given a wider circulation in order to try and supplant the list of THE CHEMIST AND DRUGGIST, and Messrs. Hague and Carr should know that quite well. One person may issue a list with just as much right as any other person so long as, in their opinion, they are meeting the need of their public, but when an official body undertakes or covers such a publication, the position is different. Anyone can see that, and a living instance is that of the Pharmaceutical Society, which declines to publish a list of poisons, as such action would multiply the difficulties in administration a hundredfold. As to this "official" minimum price list, at a recent meeting of our branch it was stated that as the prices are too high for some areas and too low for others, we could use our discretion. We were told it belongs to someone else under a contract to supply. The proprietors have the right to veto changes, but this we understood was only a sort of optional right, and financial considerations were ad-

vanced why we should not be too enthusiastic in advocating changes. It was to be regarded as a guide for chemists' prices, but could not be regarded as a list of definite prices which all members should observe. Thus the foundation of an "official list" was knocked completely away, and we are left to use our intelligence and sense of proportion in the comparison of price lists. Well, in the one you have 1,200 items, in the other 5,000: need I say more? The sun was made to rule our day, the moon our night. Alas! the latter is but reflected light.—Yours, etc.,

ONLY A LONDONER (22/1).

Plasters

SIR,—I have been more or less interested in plasters since the old days when, as an apprentice (1868), I had to mix batches of healing plaster and roll it out into sticks to retail at a penny. It went by the name of "gracious dee" as locally pronounced—probably "gratias dei." Also, being rather subject to colds, I was advised to make and wear a pitch plaster on my chest. All I remember about that was its unpleasantness, bits of dried pitch sticking to one for months. Of emplast. oxyroc., mentioned by "Xrayser II" (*C. & D.*, December 22, 1923, p. 863), I have seen it—but no more. It is a fact, I suppose, that plasters have lost their popularity, but a few years ago I was surprised at the demand in certain quarters. Red salve, to wit, had a wonderful vogue years ago, and I believe is still in demand in country places—Midlands. Emp. mini I have rarely seen in pharmacies. This, no doubt, is red-lead plaster of the old London Pharmacopœia. "Red salve" was probably compounded of this with emp. saponis, and, to judge by the odour, emp. galbani. An old chemist acquaintance had a profound belief in this as a remedy for a variety of ailments. It certainly "healed," but made a big mess of it in the process. As to the requisites for spreading plasters, one of the best I have used was, I think, of Maw's make—gas-heated; this was fifty years ago at a shop in Cheltenham, and the only one I have met with in my career. It was very useful on a particular occasion when the governor and I had to cover a whole plaster skin with emp. belladon., he at one end, I at the other! It was, I think, for a well-known M.F.H. who had been badly thrown.—Yours, etc.,

VETERAN (21/1).

Obscure Objects of Optical Societies

SIR,—Reading reports of optical societies in your paper from time to time, we who are far from London and cannot make personal inquiries are somewhat in a fog. Might I invite the secretaries of both the Institute of Chemists-Opticians and the Society of Chemist-Opticians to state the aims of their societies—or are they connected in some way? If their objects were put clearly before the chemist, he would be in a position to know which best suits his interest, as the time has come when something must be done in the way of an optical Bill. Who are the "J.C.Q.O.," who advertise that they are the only qualified opticians, a claim which every true chemist will of course deny?

Yours truly,

YORKSHIRE (23/1).

Unemployment

SIR,—Another ninety-five apprentices or students have been registered by the Pharmaceutical Society, and simultaneously the report of the Education Committee shows that the Committee are still labouring with the work of altering or raising the syllabus without a word as to how the students are to find berths after qualification. Is it not time that the Council took some little thought as to where it is leading us? I would suggest that a good topic for discussion by the branches would be "The prospects of the pharmacist after qualifying"; the combined opinions of the branches all over the country might possibly produce some beneficial suggestions. There must be many a young man who receives his certificate to-day with no work or possibility of it.

Faithfully yours,

LABOURER (8/1).

Present-Day Travellers

SIR.—In reply to "Emptora" in your issue of January 19 (p. 105), he gives no *modus operandi* as to how travellers should approach buyers. Does he ever contemplate what is lost by not interviewing all travellers? I contend that a great deal may be learned from a few minutes' conversation with any and all "commercials"; and I should much like to know how he would act if he was on the road to-day.—Yours faithfully,

FORWARD (23/1).

The Future of the Conference

SIR.—I fully agree with "Xrayser II's" remarks (*C. & D.*, December 29, 1923, p. 907) that the British Pharmaceutical Conference of last year cannot be taken as a criterion of future events. Everything combined to make the Conference of 1923 an exceptional event, and it would have been equally or more successful if it had been held under the old *régime*. We must await the meetings of the next year or two before we can say whether the change has been beneficial or otherwise.

Yours faithfully,
CONFERER (31/12).

Vindictive Prosecutions

SIR.—The remarks of the President of the Pharmaceutical Society on the advisability of refusing to dispense prescriptions containing dangerous drugs, unless absolutely assured of their genuineness (*C. & D.*, November 3, p. 617), show that the Council, a little late, has been forced to the same conclusion that all pharmacists in retail business arrived at some time ago. And now we have the order respecting the labelling of preparations containing certain poisons, with all the traps arising from it. Before long we shall find pharmacists being prosecuted because they have declared 0.005 per cent. of morphine content in a cough mixture instead of 0.006 per cent. After a few such cases, shall we see the President addressing a branch and advising the members not to sell the poisons mentioned in the Order? I fully expect that sooner or later we shall reach this *reductio ad absurdum*.—Truly yours,

ORDINANCE (5/10).

Subscribers' Symposium

For interchange of opinion among "C. & D." readers and brief notes on business and practical topics.

Suggested Examination Problem

Some time ago I had the following Insurance prescription to dispense:—

Glyc. bellad. ...	... 1 part
Ung. iod. ...	... 2 parts
Ung. hyd. co. ...	... 4 parts
Ung. plumbi subacet. ...	6 parts

Candidates for the Qualifying examination might be asked to make 5*iss.* of this and state what changes, if any, would be likely to occur within forty-eight hours.—W. T. (284/20).

Colouring Maggots

Referring to a correspondent's inquiry about colouring maggots (*C. & D.*, January 5, p. 35), several years ago I recollect trying, with some success, feeding maggots on some of those aniline dyes capable of staining living tissue. I cannot give you particulars of the dyes used (nor, in fact, of the experiments), but I remember a blue and a red coming up fairly well. If I were trying again, I should be inclined to experiment with alkanet in fat (lard) and with alumina lakes—e.g., 5 per cent. of suitable dye in sodii carb. solution, which is precipitated with alum.—E. W. (9/1).

Holiday Exchange of Houses

There are, no doubt, many chemists in Scotland who would like to spend their annual summer holiday in England, and vice versa; and there may be those who for the months of either July or August would be prepared to exchange houses. I suppose most of us go on holiday, shut our own houses up and then pay

an outrageous sum to get a house elsewhere. I, for one, residing in Edinburgh, with house containing two public rooms, three bedrooms, maid's room and garden, near golf course, with fine open views, would be prepared to exchange for a seaside house during August, and should be glad to hear of any brother chemist with similar accommodation to exchange.—*Scotia* (15/1).

Labelling Methylated Liniments

I frequently see labels in retail pharmacy that do not bear the word "methylated" for soap or other liniments that are prepared with methylated spirit. The same thing is met with in ships' medicine chests. A reference to a court case respecting such a liniment on p. 234 of the *C. & D. Diary*, 1924, confirms my practice to put the word "methylated" on all such labels.—W. F. (28/12).

Legal Queries

S. O. (18/1).—The *C. & D. Diary*, 1924, gives the particulars you ask for regarding the registration of trademarks and the formation of companies. The cost of the former depends upon whether there is opposition to the application for registration. If there are any points not explained in the *Diary* we shall be glad to answer them.

H. H. (14/1).—Infusion of digitalis is a poison within the meaning of Part 2 of the Poisons Schedule. At present the regulations as to the sale of poisons by wholesale requires the name of the article, the word "poison," and the name and address of the seller to be on the label. The new Order in Council which is expected shortly will require the proportion of the poison to be stated in addition, but the details are not yet available.

T. G. (20/1).—SALE OF POISONS.—The conditions of the sale of Part I poisons, about which you complain, have been in force since 1888, and apply to the retail sale of cocaine preparations. As you will see from the *C. & D. Diary*, the purchaser must be known to the seller or be introduced by some person who is known to the seller. The expression "known" to the seller has not been defined legally, but it does not necessarily mean that the person is intimately acquainted with the seller.

L. M. W. (16/1) asks whether it is an expensive or troublesome matter to change one's name by assuming an additional Christian name? Is it possible to be rechristened? [It is not possible to be rechristened; but anybody is at liberty to change his name. No special formalities are essential, but it is usual to put the change of name on record by executing a deed poll, which is enrolled in the Central Office of the High Court. Notice of the execution of the deed is usually published in the "London Gazette." The cost of complying with these formalities should not be great.]

H. F. & Co. (17/1), a firm of manufacturing chemists, wishing to take out a licence to sell spirits of wine to chemists, applied to the Inland Revenue, but were told that they could not get it without a magistrates' certificate. They then interviewed the magistrates' clerk, who told them a certificate was not necessary. "H. F. & Co." ask which is correct. [It is assumed that the licence wanted is the special chemist's licence under the Finance Act, 1911; if so, no certificate is necessary. A form of application (No. 134 D) can be obtained from the local officer of Customs and Excise, and upon filling up this and paying the licence duty of £10, the licence will be granted to any manufacturing or wholesale chemist and druggist. The licence authorises sale in any quantity of rectified spirits of wine of not less than 43 degrees above proof for medicinal purposes to duly qualified medical practitioners or duly registered pharmaceutical chemists or chemists and druggists or persons requiring the spirits for use for scientific purposes in a laboratory. The regulations require that sales shall be made only in closed vessels, and a record must be kept of them.]

Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

J. T. G. (15/1).—PRESCRIPTION COSTING.—The items on prescription presented late at night should be charged 1s. 6d. each.

C. B. (15/1).—SOAP-BUBBLE BLOWING SOLUTION.—The following is Professor Boyes' solution as given in his book on "Soap-bubbles":—

Fill a 40-oz. clean stoppered bottle three parts full of distilled water, add 1 oz. of pure oleate of soda. Leave it for a day or two until it dissolves. Nearly fill up the bottle with Price's glycerine and shake well. Leave the bottle, stoppered of course, for about a week in a dark place. Then with a syphon draw off the clear liquid from the scum. Add one or two drops of liq. ammon. fortiss. to each pint of the liquid. Do not filter, and never return the liquid which has been used to the stock bottle.

Alpha (11/1).—THE MAIL ORDER BUSINESS should not cut prices, though in some instances the system claims to do so. Such claims may generally be discounted by something else not on the surface. If your theory of consistent treatment is correct, it would appear that seven drugs might be used for a trial sample at a nominal price of 2s. 6d., postage included. You could then advise treatment over a month, as such complaints as you mention require the remedy to be continued for some time, and for this 7s. 6d. would be a fair price. Naturally the prices quoted are given on a basis of satisfactory and extensive advertising, as otherwise they are too high.

W. E. P. (14/12).—HAIR DRESSING.—This sample, described as being of German origin, is said to have the advantage of not being sticky. The spirit strength is about 12 o.p. The total solids dried at 100°C. are only 0.05 per cent., so that it appears to be only perfumed spirit.

D. S. (8/1).—C. & D. RETAIL PRICE LIST.—Fumigating pastilles are listed under pastilles, fumigating.

Arnica (8/1).—BRITISH PHARMACEUTICAL CODEX.—As this work has been adapted to the B.P. 1914, it follows that tr. arnicæ in the B.P.C. liniment will be that of the B.P. 1914 unless there is a statement to the contrary.

P. E. K. (10/1).—The correct formula for the cough mixture was printed in the C. & D., December 15, 1923, p. 829.

Population (9/1).—VALUE OF PRESCRIPTION BOOKS.—There is not much to guide us in the particulars you give as to the value to a chemist of the prescription books purchased from a dispensing business that is being closed. A reasonable number of repeats is to be expected from prescriptions dispensed in the preceding six months. If this is taken as 10 per cent. of the number of prescriptions (in this case 4,000) the value would be about £50. On the other hand the advertising value may be worth something to your business, but the possible increase of business that is estimated to result should not be exaggerated.

D. N. (8/1).—The Educational Number of THE CHEMIST AND DRUGGIST, published on August 11, 1923, gives full details of the curriculum for the Qualifying examination. A student cannot be registered by the Pharmaceutical Society until he has passed an approved preliminary examination. It is not illegal to employ an apprentice who has not been registered, although it is against the apprentice's interests, as the time served before registration does not count in the curriculum.

G. S. (3/1).—The manufacture of pharmaceutical preparations is dealt with in books on pharmacy, such as Lucas & Stevens' "Practical Pharmacy," and Caspari's "Treatise on Pharmacy." The "Art of Pharmacy," published in the *Chemist & Druggist Diary*, 1898, should also be consulted.

H. W. R. (17/1).—SHEEP-BRANDING STICK.—We have no formula for this, but you could devise one readily by using a base of olein and resin and incorporating with this vegetable black, venetian red or ultramarine, according to the colour required.

H. W. G. (17/1).—STOMACH AND LIVER MIXTURE.—The formula for which you ask is as follows:—

Bismuth. carb.	...	...	...	3ij.
Sodii bicarb.	...	...	...	3ij.
Tr. nuc. vom.	...	...	...	3ss.
Spt. ammon. co.	...	...	...	5vj.
Spt. chlorof.	...	...	...	5iss.
Succ. tarax.	...	...	...	3iv.
Aq.	...	...	ad	3lxxij.

Dose: 5ss. t.d.s.

The reference number as a "known, admitted and approved" remedy is "C. & D. Diary, 1904, No. 4" or "P.F. 4."

S. L. O. (4/1).—SPT. VINI RECT. 58 over proof (90 per cent. alcohol) costing 133s. per gallon, less rebate per proof gallon. What is the actual cost price? The cost is 39s. 5d. per gallon. The method of arriving at this result is as follows: 5 gallons. alcohol cost 133s. per gall.=665s. Actual rebate on 5 gallons.=197s. (665s. less 468s.). Then 197s. divided by five gives 39s. 4d., or nearer 39s. 5d. You should, however, make allowance for loss.

A. McC. (9/1). inquires what is wrong with a dog which has a swollen abdomen. The animal permits free handling without showing any sign of pain, and moves slowly but willingly. Its breathing, chest and kidneys are working practically normally. There is some constipation. [The dog is suffering from dropsy, proceeding either from disease of the liver or kidneys—from the symptoms mentioned in all probability the latter. The following should be given:—

• Ferri sulph.	...	...	...	...
Pot. iodid.	...	...	aa	gr. v.
Ext. gentian.	...	...	...	gr. ij.
Quin. sulph.	...	...	...	gr. j.
Excip.	...	...	...	q.s.

m. Ft. pil. Sig. One twice daily.

The food should be carefully considered. No sugar or food containing too much starch should be allowed. Raw beef, fish, milk, soups, eggs, etc., can be given. As the animal has attained an average age for a dog, and the disease has extended over a year, its cure is doubtful.]

Retrospect of Fifty Years Ago

Reprinted from
"The Chemist and Druggist," January 15, 1874.

Homeopathic Prescriptions

The peculiarities of homeopathic pharmacy entail certain peculiarities in prescribing which must be noticed.

1. Since there are numerous preparations of each medicine, it is essentially necessary to mark this after the name of the medicine. For example, it is not sufficient to order Belladonna. The name must be followed by the sign denoting the particular preparation. Thus:—

Bell. φ, Bell. 3x, Bell. 6, Bell. 30,

would denote respectively the mother tincture, the third decimal, the sixth centesimal, and the thirtieth centesimal attenuations of the medicine.

2. After the sign denoting the preparation must follow the usual signs for the quantity; and in connection with it must be a notification as to whether triturations, tinctures, pilules, or globules are wanted. Thus:—

Merc. vivus 3x grs. 2 = 2 grains of 3rd decimal trituration.

Merc. vivus 6 gtt. 2 = 2 drops of 6th centesimal tincture.

Merc. vivus 6 pil. 2 = 2 pilules of 6th centesimal attenuation.

Merc. vivus 30 gls. 3 = 3 globules of 30th centesimal attenuation.

These may be written thus:—

Merc. vivus grs. $\frac{2}{3}$ x, gtt. $\frac{2}{3}$, pil. $\frac{2}{3}$, gls. $\frac{3}{30}$.

RAILWAY STRIKE

Messrs. J. C. ENO, Limited, beg to remind their customers that Stocks of Cases containing their

SPECIAL ADVERTISING OFFERS

— OF —



on Window Display Terms are held by their Agents in the following centres :—

ENGLAND

Newcastle-on-Tyne :

Agents—PENNEY & CO., Royal Bldgs.,
Bigg Market, Newcastle

Liverpool :

Agents—HEATHS (London) Ltd., 99 High Street, Wavertree, Liverpool

Birmingham :

Agents—A.S.PRICE & CO., Ltd., Reliance Works, Blackheath, Birmingham

Leeds :

Agents—TUNGATE & CO., 5 York Place, Leeds

Bristol :

Agents—SANGERS, 77 Howard Road, Westbury Park, Bristol

London :

Cases delivered by our own vans from "Fruit Salt" Works, Pomeroy St., S.E.14

SCOTLAND

Glasgow

Edinburgh

Dundee

Aberdeen

Agent—D. MACAULAY, 99 Glassford Street, Glasgow

IRELAND (Northern)

Belfast :

Agents—HARWOOD BROS., 1 Wellington Place, Belfast

IRELAND (Free State)

Dublin :

Agents—HARWOOD BROS., 79 Dame Street, Dublin

J. C. ENO, Limited, Victoria Embankment, London, E.C.4.

ALKALOIDS

Fine Chemicals. Opium Derivatives

SALICIN
CAPSICIN
CANTHARIDIN
PODOPHYLLIN
HYOSCYAMINE
HOMATROPINE
JALAP RESIN
IRIDIN
ALOIN
GINGERINE
LITHIA SALTS
SCAMMONY RESIN

MORPHINE
CODEINE
STRYCHNINE
CAFFEINE
EMETINE
THEOBROMINE
CHLOROFORM

OPIUM
TELA VESICATORIA
VERATRINE
ATROPINE
CHRYSAROBIN
DIAMORPHINE
EMETINE
BISMUTH IODID.
EMP. CANTH. LIQ.
ETHYL MORPHINE
HYDROCHLOR.
ERGOTIN

T. & H. SMITH LTD

BLANDFIELD WORKS: 25 CHRISTOPHER STREET: 32 & 34 VIRGINIA STREET
EDINBURGH : LONDON, E.C.2. : GLASGOW.

ACIDS (Pure and Commercial)

SULPHURIC
HYDROCHLORIC
NITRIC
LACTIC
OXALIC
PERCHLORIC ACID
Puriss. for potash determination,
TARTARIC
CITRIC, &c., &c.

FINE & MEDICINAL CHEMICALS

HYDROGEN PEROXIDE (100 vols.)
ALKALOIDS
SACCHARINE
MERCURIAL SALTS &c., &c.

CRUDE DRUGS & AMERICAN BOTANICALS

ROOTS
HERBS
LEAVES
BARKS, &c., &c.

Ask Berk

F. W. Berk & Co., Ltd.,
1 Fenchurch Avenue,
London, E.C.3

Telephone: Avenue 4032 (5 lines)
Telegrams: "Berk, phone, London."

Works: Abbey Mills Chemical Works, Stratford, E.15

Pentrepoeth Chemical Works, Morriston.

Sole makers of BAA, purest and best
accumulator acid.



CHEMICALS

FOR PHARMACY, TECHNOLOGY AND PHOTOGRAPHY

For immediate delivery

**ACID ACETYL SALICYLIC
GUAIACOL CARBONATE
HEXAMINE
METHYL SULPHONAL
PARAFORMALDEHYDE
PHENOLPHTHALEIN
POTASS. PERMANGANATE
SULPHONAL
VERONAL**

JOHNSON & SONS

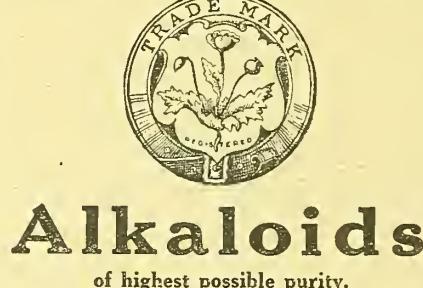
Manufacturing Chemists, Ltd.

23 CROSS STREET, FINSBURY, E.C.2.

MANCHESTER OFFICE 12 QUEEN STREET, DEANSGATE.

J. F. MACFARLAN & Co.
9 & 11, MOOR LANE, LONDON, E.C.2.

Morphine
 Codeine
 Apomorphine
 Aceto-Morphine
 Ethyl-Morphine
 Cotarnine
 Narcotine
 Papaverine



Atropine
 Emetine
 Eserine
 Homatropine
 Hydrastine
 Pilocarpine
 Strychnine
 Veratrine

Caulophyllin
 Cimicifugin
 Euonymin

Extractives
 standardised in fine dry powder.

Hamamelin
 Iridin
 Leptandrin

Morphine, Aceto-Morphine, Opium being subject to the restrictions of the Dangerous Drugs Acts, are offered by us in accordance with the regulations issued under those Acts:

Works: ABBEY HILL & NORTHFIELD, EDINBURGH.

WHIFFEN & SONS, LTD.

INCORPORATING
GEORGE ATKINSON & CO.

BATTERSEA AND FULHAM, LONDON, S.W.

EMETINE PURE & SALTS

ATROPINE
 BROMIDES
 CAFFEINE
 CAMPHOR

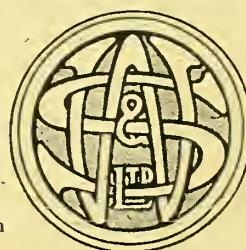
CLOVE OIL
 IODIDES
 NICOTINE
 QUININE

SANDALWOOD OIL
 SALICIN
 STRYCHNINE
 VERMILION

WHIFFEN & SONS, LTD.
 GEORGE ATKINSON & CO.

Telephones { Battersea 1234/6 Putney 3385

Telegrams { Whiffen London
 Camphor London



JANUARY 26, 1924

THE CHEMIST AND DRUGGIST
SUPPLEMENT

British Empire Exhibition

WEMBLEY, 1924

BURGOYNE, BURBIDGES & CO.

LTD.

Manufacturing Chemists, Wholesale and Export Druggists

EAST HAM, LONDON, E.

INVITE INSPECTION OF
THEIR PRODUCTS AT **STAND 56A**

Refined Organic
and Inorganic

CHEMICALS

GALENICAL PREPARATIONS

Compressed Tablets of Pure Drugs and Chemicals
.. . for Oral and Hypodermic use. .. .

Pills. Compressed Lozenges

SOLUBLE ESSENCES

UNIVERSAL FRUIT SALINE

A CORDIAL INVITATION is extended to all interested in
Modern Pharmacy to visit and inspect their Laboratories
and Works at **HIGH STREET SOUTH, EAST HAM, E.**,
where their model plant of the most scientific and up-to-date
nature may be seen in operation. Telephone : 686 East Ham

CRESCENT.



Trade

Mark

BRAND

SODA ASH*Guaranteed 58°—98/99% Sodium Carbonate***CAUSTIC SODA***Solid: 76/77°, 70/72°, 60/62°. Flake: 76/77°***BICARBONATE OF SODA***Guaranteed to conform to the requirements of the B.P. Essential Ingredient of all Effervescent Salines***SILICATE OF SODA***Water-white—for Egg Preserving***PURE SODA CRYSTALS***(Washing Soda, Pea and Bean size Crystals)***CARBONATE OF AMMONIA (Lump and Powder)***Guaranteed to conform to the standard of the B.P.***BRUNNER, MOND & CO., Limited**

NORTHWICH, CHESHIRE

No. 13

LONDON SALES OFFICE · · · 7 CAVENDISH SQUARE, W.1

THE UNITED ALKALI CO. LTD.**CHLORIDE OF LIME***In $\frac{1}{2}$ -lb., $\frac{1}{2}$ -lb., and 1-lb. Cartons and Zinc Canisters.***FOR ALL CLIMATES.****CHLOROFORM B.P. Quality****SPEDDO W.C. Bowl Cleanser
and Disinfectant****“CHLOROS” Liquid Disinfectant***Invaluable for use in connection with Foot and Mouth Disease. Packed in returnable 5-gall. jars.***PROMPT DELIVERY CAN BE GIVEN**Telephone :
Bank 9280.**Head Office : CUNARD BUILDING, LIVERPOOL.****Telegrams :**
"Ubique."

WE SPECIALISE in
DRUGS
CHEMICALS
GALENICALS
FOR DISPENSING

*and can supply FINEST quality
at competitive prices.*

PLEASE SEND US YOUR ENQUIRIES

J.C. ARNFIELD & SONS, Ltd.

WHOLESALE & EXPORT DRUGGISTS,
MANUFACTURING CHEMISTS,

Telegrams :
"Chemicals."

STOCKPORT.
Established 1736.

Telephone :
601 (2 lines)
Private Branch
Exchange

*'Roche'
Pharmaceutical
Products*

TRADE MARKS:
'OMNOPON.'
'PITUGLANDOL.'
'DIGALEN.' ETC.

Trade Mark

'SEDOBROL'

Sedative Bouillon

TABLETS

are protected by the

P.A.T.A.

at prices which assure the retailer a
profit of 35.5% on cost.



THE HOFFMANN-LA ROCHE CHEMICAL WORKS LTD.,
7 & 8, Idol Lane, LONDON E.C. 3.

GRAND PRIX, BRUSSELS, 1910
GRAND PRIX, LONDON, 1909
GOLD MEDAL, ST. LOUIS, 1904

Estab. 1844.

Thomas Tyrer & Co.
LIMITED.

Thomas Tucker, Manager.
Stratford, London, ENG.

Tel. Nos.: MARYLAND 2510 and 2511.

*Our Reputation
Your Guarantee*

"Sterling"

BRAND

FINE CHEMICALS

Pharmaceutical and Technical.

**ETHERS, HYPOPHOSPHITES
BISMUTHS, MERCURIALS,
GRANULAR AND SCALE
PREPARATIONS.**

Acetone, Acids, Amyl-Acetate, Antimony Salts, Barium Salts, Bromides, Citrates, Collodions, Calcium Salts, Copper Salts, Driers, Iodides, Lead Salts, Manganese Salts, Nickel Salts, Phosphides, Phosphates, Potassium Salts, Pyroxylin, Siccatives, Sodium Salts, Sulphur, Thorium Salts, Tungsten Salts, Zinc Salts.

*Rare Gases—
Argon, Helium, Neon, Krypton.*

CHAS. PAGE & CO., LTD.

37/39 KING WILLIAM ST., LONDON, E.C.4

422/425 Royal Exchange, Manchester. 31 St. Vincent Place, Glasgow.

Offer at first hand

ACETANILIDE
ACID TANNIC
BARBITONE
GUAIACOL CARB.

NAPHTHALENE
PHENAZONE
SULPHONAL
UREA, Etc., Etc.

WHOLESALE QUANTITIES ONLY.

TELEPHONES

{ HEAD OFFICE : CITY 5408 (8 lines).
MANCHESTER : CENTRAL 1882 (2 lines).
GLASGOW : CENTRAL 452.

TELEGRAMS

{ "PAGANINI LONDON."
"PAGANINI MANCHESTER."
"PAGANINI GLASGOW."

SAPONINE POWDER (Soluble)
CREAM OF TARTAR 99/100% B.Ph.
TARTARIC & CITRIC ACIDS B.P.
Finest Essential Oil Lemon
(NEW CROP).

We have large quantities for sale and
are quoting particularly favourable prices.

C. W. FIELD, LTD.
92 WOOD STREET - LIVERPOOL

"Aniline Dyes"

for all purposes.

We specialise in supplying
Dealers and Manufacturers requiring
SMALL QUANTITIES.

ALL SHADES AND COLOURS. WE CAN DUPLICATE
ANY COLOUR. SUBMIT YOUR REQUIREMENTS AND
SAMPLES. PROMPT ATTENTION WILL BE GIVEN.

WILLIAM ALLEN PEAIRS
Portland Place, Stalybridge, England.

SOLAZZI

BECAUSE

LIQUORICE JUICE

IS PRE-EMINENTLY
THE CHEMIST'S BRAND

- 1 IT IS RECOGNISED AS SUCH BY THE LEADING MEDICAL JOURNALS.
- 2 IT IS RECOGNISED AS SUCH BY CHEMISTS AND THE PUBLIC, AS IS PROVED BY ITS UNINTERRUPTED SALE OF OVER 100 YEARS.
- 3 THE SALE IS HELPED BY STEADY AND INTELLIGENT ADVERTISING.
ASK YOUR WHOLESALER FOR OUR LATEST HANDBILL.
IT WILL INTEREST YOU AND IT WILL INTEREST YOUR CUSTOMERS.



Trade Mark

INDICATORS

(Bridycor Brand)

The following are now available:—

NEUTRAL RED
METHYL RED
METHYL ORANGE
ACID MAGENTA
CONGO RED

BRITISH DYESTUFFS CORPORATION, LTD.

70 Spring Gardens - - - MANCHESTER.

**ACID
SALICYLIC**

Warrington Chemical & Drug Co., Ltd.

Paddington, nr. Warrington.

Telegrams: "Salicin, Warrington."

PARA AMIDO PHENOL

**SODA
SALICYLATE**

Pyrogallic Acid Gallic Acid

Manufactured by **J. L. ROSE**

At ABBEY ROAD, BARKING, LONDON, E.

Wholesale and Export Only.

When dealing in future with prescriptions for
 DIGESTENZYMES, Elixir and Tablets (Indigestion, Malassimilation,
 SENECTIONIS, Elixir (Utero-ovarian complaints).
 ICHTHYORESORCIN, Pasta (Skin Diseases, Eczema, &c.).
 GAULTHERIE, Pasta (Rheumatism, Sciatica, &c.).

Please Address—

DAMANCY & CO., Harrow-on-the-Hill.
Makers of Tablets, Pills, Ointments, &c.
 ALL KINDS OF SURGICAL DRESSINGS and INSTRUMENTS

COURTIN & WARNER Ltd.

13 HARP LANE, E.C.3.

Telephones:

ROYAL 1444, 1445, 1446.

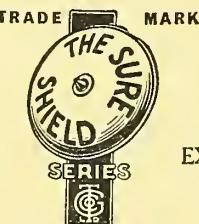
Telegrams:

"ACCOUNTIWA, BILGATE, LONDON."

For
FINE CHEMICALS
ESSENTIAL OILS
SYNTHETICS
CRUDE DRUGS
SULPHUR and
SALTPETRE

THOS. GUEST AND CO., LIMITED ANCOATS, MANCHESTER

THE
MARK



OF
EXCELLENCE.

- Iodised Throat Tablets
- B.C.L. Chest & Lung Lozenges
- Red Gum Pastilles
- Glycerine, Lemon and Honey Pastilles
- Bismuthated Magnesia Lozenges

FULL RANGE OF NEW SHOWCARDS
FOR THE COMING SEASON.

London Depot:
1 SWAN STREET, MINORIES, E.1
Telephone - - - Avenue 6255

L S D

is the title of the well known firm of TABLET MAKERS. It also means more Pounds, Shillings and Pence for the chemist who sells

L S D TABLETS

	25	50	100 per 1000
Ammon. Quinine, drm. 1	4/9	7/9	14/- 9/9
Aspirin, gr. 5	..	3/3	4/9 7/6 3/6
Cascara, gr. 2	..	3/-	4/6 7/- 3/3
Hexamine, gr. 5	..	4/-	6/- 10/6 5/-
Iodised Throat	..	3/3	4/6 8/6 3/3
Sodium Citrate gr. 2	3/-	4/3	6/- 2/3
Thyroid Gland gr. 1	3/9	5/3	8/6 4/6

Reduced Prices for Quantities.

Purity of Drugs and Accuracy of Dose Guaranteed.

Our Tablets are so elegantly finished, and so attractively presented, that the chemist always gets the highest prices for them.

Own name Labels and Cartons of Distinctive Designs printed for all orders.

Send Postcard for Complete Catalogue.

**Laws, Stracey & Dymond
Limited,
LION LABORATORIES - WATFORD.**

BRITISH ASPIRIN B.P.

The Original British Aspirin Makers invite your enquiries for keen prices. Spot, forward or contract quotations.

BRITISH SALICYLIC ACID B.P.

Quality and price unbeaten.

Buy the best quality and support home industry by ordering from

PIERSON, MORRELL & CO., LTD.

100 Queen's Road, BARNET.

Cables and Telegrams: "PIERSON, MORRELL, BARNET,"
Telephone: - - - BARNET 723.



The following special

PASTILLES

are recommended:

Honey, Aniseed & Chlorodyne

In two sizes. A splendid winter pastille.

Glycogoric

These contain all the ingredients
of Glycerine and Paregoric,
excepting Opium.

Glycerine, Wild Cherry, and

Chlorodyne

The pastille with a new flavour.

*All the above mentioned are amply supported by handsome
show matter, cartons, etc., and a ready sale is well assured.*

Write for Prices to

Eagle Laboratories, Manchester

TELEGRAMS: "TROCHES MANCHESTER."

RUSSIAN CRUDE DRUGS

LYCOPodium

SOAP ROOT

HERBA ADONIS VERNALIS
(Natural and Cut)

CANTHARIDES (Whole Fly and Powdered)

CALAMUS ROOT (Peeled and Unpeeled)

LIME TREE FLOWERS

FRANGULAE BARK

ISINGLASS, BELUGA, SALIANSKY & SAMOVY,

ARCOS LIMITED

Soviet House, 49 Moorgate, London, E.C.3

 Telephone Nos.: London Wall 6626/35
 Private Branch Exchange.

 Telegrams: ARCosARCos,
 AVE. LONDON.

Moscow Branch: Tverskaya 1, (Ugol Ploschadi Revolutzii)

FEMERGIN

 The principal alkaloid of Ergot,
 absolutely pure and stable.

SCILLAREN

 The pure active principle
 of Squill.

IPECOPAN

 The pure active ingredients
 of Dover's powder.

FELAMINE

 Salt of Biliary Acid
 with Hexamina.

Obtainable from all Wholesalers.
THE SANDOZ CHEMICAL CO., LTD.

(Pharmaceutical Department) BRADFORD.

Telephone: LONDON WALL 4391. BANK 275.

Cable Address: TAARINCO, LONDON.

THE EASTERN & RUSSIAN TRADING Co., LTD.

8 Drapers Gardens, Throgmorton Avenue, London, E.C.2.

SOLE DISTRIBUTERS OF THE ORIGINAL

SANTONIN

B.P. 14

IN ORIGINAL 1 KG. PACKETS

FROM RUSSIA TO THE WHOLE WORLD.

STOCKS IN LONDON.

Cable Address:
"CELAITCH NEW YORK."Codes:
A B C, Fifth; Bentley's Improved Private.

CHAS. L. HUISKING, INC.

5 Platt St., New York City.

**BROKERS & COMMISSION MERCHANTS,
DRUGS : CHEMICALS : OILS : SPICES.
PROPRIETARY MEDICINES, DRUGGISTS' SUNDRIES.***Buying and Selling Agents for leading
Houses in all parts of the World.*

European Manufacturers desirous of placing their goods in the American market would do well to communicate with us. Our outlet for goods is very large.

London Correspondents—CHAS. L. HUISKING, LTD., 74 Gt. Tower St., London, E.C. 3.

Phone: ROYAL 2652.

Cable Address: "CELAITCH LONDON."

Telegrams: "CELAITCH, BILGATE, LONDON."

WEST INDIAN TAMARINDS

(Finest quality 1923 Crop)

FRENCH GROUND NUT OIL

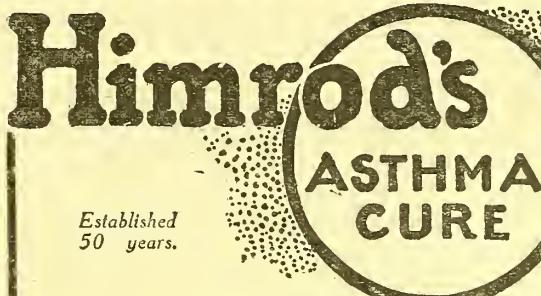
(Finest Emulsifiable)

SPOT STOCKS. Quotations C.I.F. any Port.

Tucker & Cross,

15 St. Mary Axe, London, E.C.3.

Telephone: Avenue 2569. Telegrams: "Glucose, London."

HOOOPER & CO.**CHEMISTS' SUNDRIES.****SURGICAL RUBBER GOODS.****HIRE DEPARTMENT.***Reliable Hot Water Bottles.***26 Charlotte St., London, W.1.**TELE_{phone}: Museum 2160 (Three lines).
GRAMS: "Superabound, Wesdo, London."

IT is a powder to be burned and the fumes inhaled without any bad after-effects. Recommended by physicians throughout the world.

"I have tried every remedy ever invented, and 'Himrod's Cure' is the only one in which I have absolute confidence."—EMILY FAITHFUL.

"This is an excellent remedy for Asthma."—Sir MORELL MACKENZIE (in his Clinical Lecture at the London Hospital and Medical College).

"The only relief I could get; if I had only known of it before."—LORD BEACONSFIELD, in his dying moments.

Himrod Manufacturing Company,
SOLE PROPRIETORS,

270 WASHINGTON STREET,
JERSEY CITY, N.J., U.S.A.

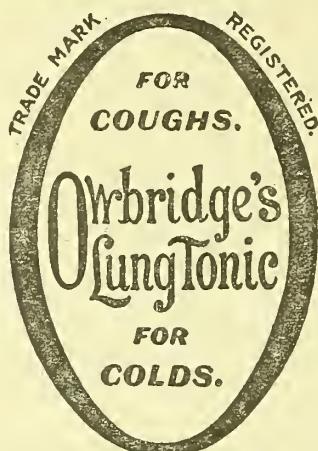
A PROFITABLE WINTER LINE

WHAT YOU PAY

COST PRICE

1 gross	1/3..6	12 0
1 doz.	3/-..1	7 0
<hr/>		
	£7 19 0	

Carriage Paid.
Terms : C.W.O.



WHAT YOU RECEIVE

SELLING PRICE

1 gross	1/3..9	0 0
1 doz.	3/-..1	16 0
<hr/>		
	10 16 0	
Cost 7 19 0		
<hr/>		
PROFIT £2 17 0		

WE HELP YOU BY EXTENSIVE ADVERTISING

W. T. Owbridge, Ltd., The Laboratory, Hull.

Kay's Compound Essence

OF LINSEED, ANISEED, SEMEGA, SQUILL, TOLU, ETC
Registered LINSEED COMPOUND Trade Mark

for COUGHS & COLDS



GENERATION after generation have learned to rely upon this famous home remedy. The quiet impressiveness of the advertising, always devoid of strident tendency, appeals to the classes of the public who form your best-paying customers and confirms the impression of trustworthiness.

From All Wholesalers.

Protected profit (P.A.T.A.) 33½% on cost.
1/3 size (10 to 20 doses) - 11/3 per doz.
2/- " (20 to 40 ") - 18/- " "
4/6 " (48 to 96 ") - 40/6 " "

KAY BROTHERS Ltd., Stockport.

SYRUP

ROBORANS

(ROBERTS)

Recognised by the Medical Profession as
THE BEST TONIC.

Supplied in 8-oz. and 16-oz. Bottles by all the Wholesale Houses.

*Inquiries Invited for
NEW & RARE
MEDICINES*

of French, Italian and Russian Origin.

ROBERTS & CO.,

76 New Bond Street,
London, W.

5 Rue de la Paix,
Paris.



OVOID
gelatine coated
PILLS

are Reliable:

Keep in

are Soluble:

any Climate:

Entirely Dependable.

Manufactured by

McKESSON and ROBBINS, INC.

New York

U.S.A.

Makers of

CALOX Tooth Powder—MOSQUITONE—ALBOLENE—and One Hundred Household Remedies.

Antiphlogistine
and
VETERINARY
Antiphlogistine

Extra Discounts for £2 and £5
lots. Carriage paid on ALL orders.

WRITE FOR QUOTATION.

THE DENVER CHEMICAL MANUFACTURING CO.
41 ST. ANN'S ROAD - - - - - LONDON, E.3

CLARKE'S BLOOD MIXTURE & OTHER PREPARATIONS

Wholesale Prices.

		SIZES.	PRICE PER DOZEN.
Clarke's Blood Mixture	3/- & 12/-	£1:7:0 & £5:8:0	
" Miraculous Salve	1/3, 3/- & 5/-	11/-, £1:7:0 & £2:4:6	
" Special Aperient Pills	1/3, 3/- & 5/-	11/-, £1:7:0 & £2:4:6	
" Patent Skin Lotion	1/3		11/-
" Medicated Soap	1/-		9/-

Orders: Minimum quantity £16 : 4 : 0 value.
FREE CASES. Carriage paid upon orders of £100.

All Wholesale Houses keep a large stock of our Preparations and can supply smaller orders promptly.

Minimum Retail Selling Prices: 1/-, 1/3, 3/-, 5/- & 12/- Face Value, giving a PROFIT of 33½% on cost to Distributors.

An attractive Showcard and Dummies supplied on application.

Trade Mark: "BLOOD MIXTURE." Regd. No. 3275.

Sole Proprietors:

THE LINCOLN & MIDLAND COUNTIES DRUG CO., LTD.
Park Street, LINCOLN.

The House for French Pharmaceutical Preparations

Telegrams—
"Ampsalvas London." THE ANGLO-FRENCH DRUG CO., Ltd. Telephone—
238a Gray's Inn Road, LONDON, W.C. 1. Museum 4029.

Branches—PARIS, BRUSSELS, NEW YORK, MONTREAL, CAPE TOWN, SYDNEY, BOMBAY, CALCUTTA.

MELROSE TABLETS

FOR CHAPPED HANDS
A VERY PROFITABLE SELLING LINE.

Chemist's prices carriage paid.

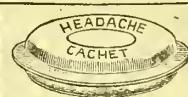
3d. tablets 1/4 dozen, 15/- gross.

3d. tablets 2/- dozen. 6d. tablets 4/- dozen.

Melrose Cream, in jars—

9d. size 6/3 dozen,

ROBERTS & SHEPPEY
2 Skipton Street, LONDON, S.E.1.



CACHETS "FINOT"

(White or Coloured)

With inscriptions in any desired tint; also Plain or Embossed.

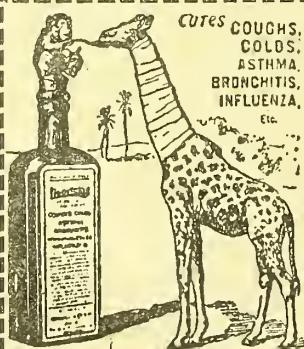
"A distinction all their own,"—C. & D.

"Perfection of Cachets,"—Lancet.

These Cachets are especially adapted for Headache, Neuralgia and other powders.

COOPER SON & CO. LTD., 80 Gloucester Road, SOUTH KENSINGTON.

In 17 Sizes to fit the various types of Cachet Machines.



Licoricine
ACTS LIKE MAGIC

For Coughs, Colds, Asthma, Bronchitis, Influenza, Whooping Cough, &c.

10½d. size	-	-	8/6 per doz. net.
1/3 "	-	-	12/- "
3/- "	-	-	27/- "

£2 worth Carriage paid. £6 worth and upwards, subject to 5% discount. Minimum Retail Prices, 10½d., 1/3 & 3/-.

N.B.—This allows the Chemist a profit of nearly 33%, or 4d. in the 1/- on £6 lots.

MANDALL & CO. LTD., 17/23 STEPNEY ROAD,
NEWCASTLE-ON-TYNE.

AN EASY-SELLING SEASONABLE LINE

GLYCERINE, LEMON & HONEY

FOR

COUGHS & COLDS



Attractively packed in White Flint Taper Neck Panels with Artistic Yellow and Black Labels.

1/3 size ...	8/- per dozen	... 90/- per gross
2/3 , ,	14/3 , ,	162/- , ,

WINDOW SHOW TERMS:

A Bonus of 1 dozen 1/3 size will be given with each gross small size or their equivalent.
SHOW CARDS SENT WITH EACH ORDER.

AN OUTLAY of 90/- YIELDS A PROFIT of £5 5s.
CHEMIST'S OWN NAME ON ORDERS OF 3 DOZEN.

SEND YOUR ORDER TO-DAY TO—

CHRYSTOID (Chemists) LTD.

1-3 Gower Street, BOOTLE, LIVERPOOL

Telephone: BOOTLE 126.

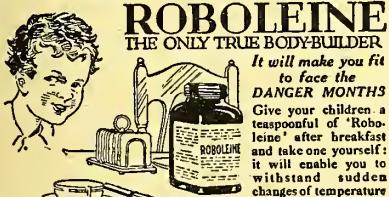
Telegrams: "BLUECHRYS, LIVERPOOL."

INTENSIFIED ADVERTISING EFFORT

TO INCREASE FURTHER THE DEMAND FOR

ROBOLEINE

THE ONLY TRUE BODY-BUILDER



Buy the ONLY Tonic Food which answers these questions satisfactorily

QUESTION 1. How long has the food been prescribed by the medical profession and used by the hospitals and sanatoria?

QUESTION 2. What is the exact formula of the food and are its constituents correct proportion?

ROBOLEINE
does answer them satisfactorily

ANSWER TO No. 1: 'Roboleine' has been so prescribed and used not merely for 1 year or 2 years but for

SIXTEEN YEARS

ANSWER TO No. 2: 'Roboleine' has this formula: Red Marrow and rib bone jelly from prime oxen; 'Cream of Malt'; Egg Yolk and Neutralized Lemon Juice. ALONE it will support life, and is therefore correctly proportioned.

ASK your doctor who don't buy ANY food UNLESS it has the FULL FORMULA. Make SURE, once and for all. Buy the BEST there is. ROBOLEINE is the ONLY food that can be taken by all children. The Danger Months are here. Fill in and send the coupon.

COUPON FOR FREE 12-DOSE SAMPLE.

To Messrs. Oppenheimer Son & Co. Ltd., 179 Queen Victoria St., London, E.C.4

NAME _____

ADDRESS _____

D.M. _____

Eleven-inch and eight-inch double column advertisements are appearing every week for the next THREE MONTHS in the

"Daily Mail," "Daily News,"

and Scottish Dailies. This in addition to the $\frac{1}{2}$ and $\frac{1}{4}$ pages in the "Sketch," "Tatler," etc.

We are spending thousands in creating the demand. Get YOUR share of this business.

Roboleine is on the P.A.T.A.

**WINDOW DISPLAY TERMS—
50% PROFIT ON OUTLAY.**

Write for Particulars to

OPPENHEIMER, SON & CO., LTD.
179 Queen Victoria Street, LONDON, E.C.4

The most successful iron tonic on the market



Telegrams:
"COLOSSALLY,
WESTCENT, LONDON."

Telephones:
MUSEUM 3663 and 3697.

COLLOSOL FERROMALT

(CROOKES)

Daily increasing in popularity among both the medical profession and the public.

Collosol Ferromalt is now supplied in an attractive packing, admirably adapted for counter display.

Collosol Ferromalt gives a satisfactory margin, and the assurance of complete satisfaction to your client.

Terms and Particulars from—

The Crookes Laboratories

(BRITISH COLLOIDS LIMITED)

22 CHENIES STREET,
TOTTENHAM COURT ROAD, W.C.1

MEAD'S
DEXTRI-MALTOSE
for
INFANT FEEDING

Nos. 1, 2, 3
Packed in lb. tins.

Prices **34/-** per dozen.

Obtainable from
all Wholesalers.

American Drug Supply Co. Ltd.
40-42 Lexington Street,
London, W.1

TESTOGAN
FOR MEN.
THELYGAN
FOR WOMEN.

A Proven Efficient Remedy
(Formula of Dr. Iwan Bloch)
INDICATED IN

**Impotence and Insufficiency
of the Hormones.**

YOHIMBIN TABLETS AND AMPOULES
**BISMOLAN SUPPOSITORIES AND OINT-
MENT.** For the Treatment of Hemorrhoids.

For literature and other information apply to
CAVENDISH CHEMICAL CORPORATION,
175 Piccadilly, London, W.1.

BUTLER & CRISPE, English Distributors.
MAY, ROBERTS & CO., Ltd., Irish Distributors,
16 Westmoreland Street, Dublin.



Linking up Profits

Here are three Snowfire Preparations, all containing those healthful emollients which have made Snowfire famous, and which sell well and profitably.

Snowfire Tablet, a wonderful skin soother and a protection against chapped hands, roughened skin and cracked lips; **Snowfire Vanishing Cream** which enables every woman to gain and retain Beauty of Skin Texture, and **Snowfire Soap**, the soap that soothes and keeps the skin soft and healthy.

Be sure to order an ample stock to meet the increased demand with the colder weather, and to reap the benefit of our Advertising Campaign which will send customers to your shop and profit to your bank.

Snowfire

Write to-day for terms and particulars to the Sole Manufacturers :
F. W. Hampshire & Co., Ltd., Riverside Works, Derby.

COMFORTINE

REDUCED PRICE

PER 12/- DOZ.

Direct or from your Wholesaler.

3 dozen lots carriage paid, Packages free, and 3 bottles extra (as bonus) for window show. Also Handsome Showcard.

Retail Price, **1/3** per bottle

Comfortine has a reputation of 50 years as the best and safest Infants' Preservative.

MACHONS COMFORTINE
LIMITED
COALVILLE, nr. LEICESTER

WINTER REQUIREMENTS

We are well placed for the following, and should be pleased to receive your enquiries :—

Eucalyptus Oil

Camphorated Oil

Licorice Juice

Cod Liver Oil and Petroleum Emulsions

Extract of Malt and Cod Liver Oil

C. R. HARKER, STAGG & MORGAN, LTD.

DEVON WHARF AND BELL WHARF,

EMMOTT STREET, MILE END, LONDON, E.1.

NEW STOCK FOR OLD



THE GREAT NERVE FOOD AND FLESH BUILDER

EVERY chemist holding stocks of IRVONA of the obsolete 3/- and 15/- sizes should return them to us, when they will be immediately exchanged for the NEW SIZES at equivalent value.

NOTE REVISED PRICES

1/3 size IRVONA.	Trade Price	12/- per doz.
5/- "	"	48/- "
12/- "	"	115/- "

Another line rapidly growing in popularity:—
"IRVOLAX" (the safe aperient).
1/3 size .. . 12/- per doz.
3/- " (four times the quantity) 27/- "

Obtainable through the usual wholesale houses, or direct if cash sent with order.

P. J. WILLIAMS
27 Finsbury Street, LONDON, E.C.2

VITAMOGEN

(VITAMINES)

INVALUABLE FOR
SLEEPLESSNESS
NERVOUS DISORDERS
CONVALESCENCE
AND
INFANTS.

Retail Price - - 2/- and 4/6.

To be obtained of All Chemists, or direct from

VITAMOGEN, Ltd.
(DEPT. C)
24/26 Holborn, LONDON, E.C.1.

In Commerce

much money is lost by trying to manufacture too many different things under one roof.

It is the specialised manufacturers who can sell their product.

We specialise in *long runs* labels and wrappers.

Send us your specification and let us quote. We are sure we shall save you money.

*Write
Dept. C.*

The Berkshire Printing Co. Ltd.
King's Road, Reading

THERMOS PRICES REDUCED

AN IMPORTANT DEVELOPMENT

has taken place in the "Thermos" Organisation by which the output will be increased, new lines introduced, and prices reduced. The effect on "Thermos" Dealers will be to place them in a better position than retailers of any other make of Flask. Dealers are advised, therefore, to make such arrangements as will enable them to take the fullest advantage of our new proposals, which will shortly be published.



THERMOS
L I M I T E D

12/14 DENMAN STREET, PICCADILLY CIRCUS, LONDON, W.

Telephone: Regent 2578.

Wires: "Cythermoso, Piccy, London."

Dr. BENGE'S BALSAM

RHEUMATISM, NEURALGIA, GOUT.

PULMO (BAILLY).

FORXOL AND HEMOSTYL.

DR. BENGE'S ETHYLCHLORIDE.

NARCOTILE.

WRITE FOR Dr. BENGE & Co., MFG. CHEMISTS,
SPECIAL TERMS. 52 CHARLOTTE ST., LONDON, W.I.

PLANO

The best emollient tablet for rough skin
and chapped hands.

Neat and attractive packing and show material.
Keep a box on the counter. IT SELLS.

3d. per tablet.

Trade prices—6 dozen, 11/6. 1 gross, 22/-.
13 to the dozen for cash with order.

DISCOUNT.—Orders of £1—2½%, £5—5%, £10—7½%.

MILNER'S CHEMICAL CO.
Robson Street, LIVERPOOL

"*Newberry's*"
FRANCIS NEWBERRY & SONS LTD

EMBROCATION

Per 10/6 dozen

Retail Price 1/3 per bottle

P.A.T.A.

On all orders of three dozen and over we allow a
bonus of one bottle per dozen.

	Cost Price £ s. d.	Selling Price £ s. d.
12 dozen at 10/6 per dozen	6 6 0	9 0 0
Bonus of 12 bottles	.. - - -	at 1/3 per bottle 0 15 0
	<u>£6 6 0</u>	<u>£9 15 0</u>

Profit ON COST 55%

May we include some with your next order?

Prepared only by

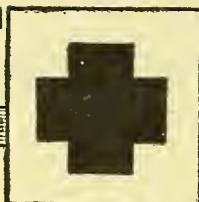
FRANCIS NEWBERRY & SONS

Manufacturing Chemists, LTD.

CHARTERHOUSE SQUARE, LONDON, E.C.1.

Branches at Cardiff and Liverpool.

Bandages



U.S.A. ARMY SURPLUS STORES

In original cases and packages

PLASTER OF PARIS BANDAGES

2 in. and 3 in. wide.

Manufactured by the well-known makers, i.e.
Johnson & Johnson (U.S.A.) and Bauer &
Black (U.S.A.)

All packages in sealed air tight tins.

CRINOLINE BANDAGES

4 $\frac{1}{2}$ x 5 yds.

Manufactured by Johnson & Johnson.

MUSLIN BANDAGES

4 in. x 5 yds.

Only WHOLESALE orders entertained for the above

WRITE FOR SAMPLES AND PRICES

DISTRIBUTING CORPORATION (LONDON), LTD.

60 Wilson Street, Finsbury Square, LONDON, E.C.1.

Telegrams: "Treocorfo, Finsq, London."

Telephone: London Wall, 1921.

Also at New York: 25 EAST 26th STREET.

Sells at Sight. Gives Satisfaction. Pays Well.

WHAT EVERY MOTHER KNOWS!

The "EVERSAFE"

BABY

PACIFIER

is her favourite because it is safe, baby cannot pull it apart. Baby's delight, because of its natural resilient nipple.

Patented Everywhere

REDUCED RATES—
No. 2, 4d. Line. 2 $\frac{1}{2}$ doz.
No. 2c. 6d. Line. 3 $\frac{1}{2}$ doz.
No. 2e. 6d. Line. 3 $\frac{1}{2}$ doz.
No. 3, 7 $\frac{1}{2}$ d. Line. 4 $\frac{1}{2}$ doz.

Sample Order, 3 dozen assorted, send 9/6 Post free

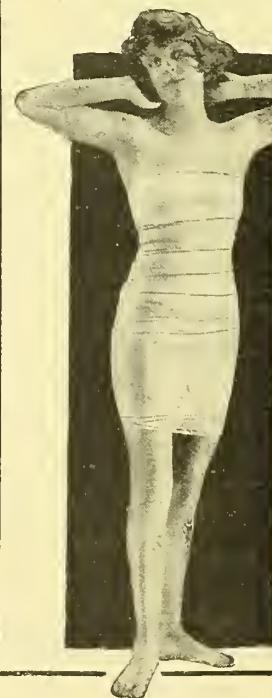


Obtainable from all Wholesalers
or direct from Patentees.

F. SCHUTZE & CO., Ltd.
BLACK BULL WORKS, LONDON, N.7

NORVIC

CRÈPE BINDERS Regd.



The natural advance on old-fashioned webbing. Will stretch to double their length. Soft, clinging, firm. Essential for all cases where durability and support are needed.

INVALUABLE IN MATERNITY.

All widths up to 11 inches.

Sole Manufacturers:
**GROUT & CO.
LTD.,
GREAT YARMOUTH.**

London Agent:
**T. S. EASTAWAY,
35 Wood Street, E.C.2.**

Stocked by all the
leading wholesalers.

TRADE

MARK

Telegrams:

"Aybelim, Finsquare,
London."Cables:
Code, A.B.C. 5th Edition

Telephone:

CLERKENWELL 1347

1348

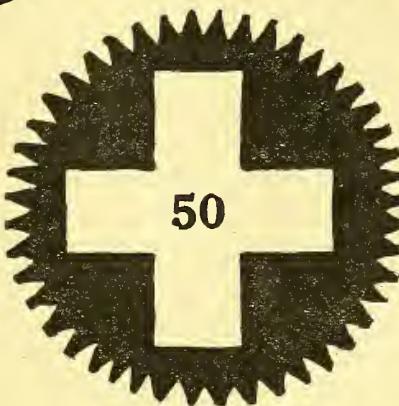
1349

Pte. Exchange



SURGICAL DRESSINGS AND CHEMISTS' SUNDRIES

THE "FIFTY," FIRST AID SET



Complying with HOME OFFICE Requirements
Workmen's Compensation Act, 1923.

— NOW IN FORCE —

Particulars and Prices upon
application.

Orders executed in
rotation.

ARTHUR BERTON LTD.

15-17 Worship Street,
LONDON

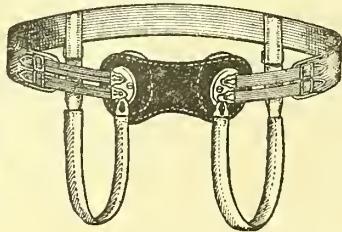
36 CHAPEL STREET,
VICTORIA BRIDGE
MANCHESTER

84 Miller Street,
GLASGOW

ABDOMINAL BELTS

Telegraphic Address—BELTRUSS,
TWICKENHAM.

Fig. 601. Inguinal Elastic Truss.

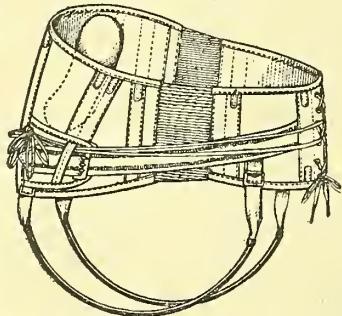


TRUSSES

SURGICAL SPRING AND
ELASTIC TRUSSES.
SEAMED AND SEAMLESS
ELASTIC HOSIERY.
ABDOMINAL SUPPORTING and
POST OPERATION BELTS.
SURGICAL CORSETS.
SUSPENSORY BANDAGES.

Makers to the Trade of every description of English, French and American Truss Springs.
Sole Agents for the United Kingdom of Great Britain, Ireland and The British Dominions
of the Celebrated

Fig. 19. Kidney Belt.

Crêpe Velpeau
Bandages.

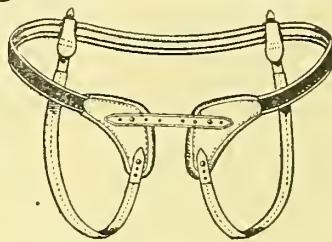
THE
R. H. HEWARD Co.,

Crown Road Works,
TWICKENHAM.

Contractors to H.M. Government.

Telephone—RICHMOND 1557.

Fig. 641. Peaked Head Scrotal.



ELASTIC HOSIERY

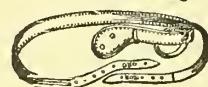
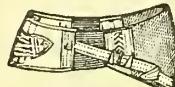
Fig. 583.
Richmond
Shoulder
Brace.



CREPE VELPEAU BANDAGES

J. H. HAYWOOD, Ltd. Surgical & Athletic Appliance Manufacturers
Castle Gate, NOTTINGHAM.

Established 1833.

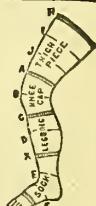


SPECIALITIES FOR WINTER.

SURGICAL ELASTIC HOSIERY, TRUSSES, SUSPENDERS, BRACES,
LADIES' AND GENTLEMEN'S BELTS for SUPPORT and WARMTH
made in Fleecy, Felt, and Chamois, etc.

CHEST PROTECTORS and SLEEPING SOCKS, ELASTIC and
LEATHER WRISTLETS, ARM PIECES, ELBOW PIECES and KNEE
CAPS for Football, Golf and Hockey.

DRUGGISTS' SUNDRIES, INDIA RUBBER HOT WATER BOTTLES
and COVERS, ELASTIC WEB BANDAGES, all lengths, widths and qualities.



LOWEST QUOTATIONS AND SAMPLES ON REQUEST.

Surgical Rubber Goods

VENUS, OWL, GODIVA
& BALLOON BRANDS.

NOTICE.—Several instances of the sale of VENUS BRAND goods
other than their make having been brought to the notice of Joseph Harris & Co., their Solicitors
are instructed to take proceedings against anyone (Makers or Vendors) fraudulently using the
name or design of VENUS or any imitation thereof in connection with Seamless Moulded Goods.

SEAMLESS MOULDED SURGICAL GOODS, PESSARIES, HOT WATER
BOTTLES, URINALS FOR NIGHT OR DAY USE. Wholesale & Export Only.

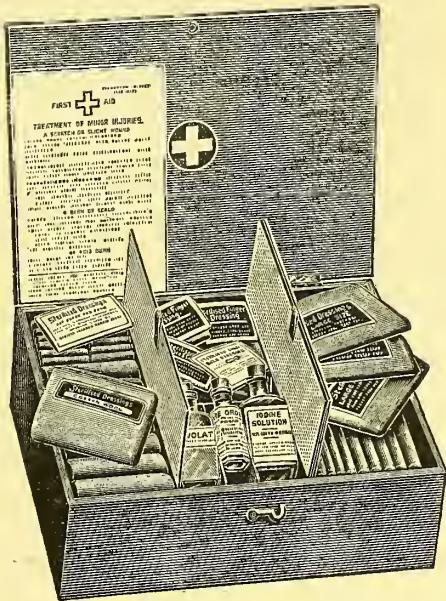
JOSEPH HARRIS & CO., Rubber Works, Broadheath, Altringham.

Our
Complete
Price List
of
Druggists'
Sundries
is now
Ready.

If you have
not already
received a
copy, we
shall be
pleased to
send one
to you on
receipt of
card.

FIRST-AID CASES

As required under the
Workmen's Compensation Act, 1923



Made in 4 sizes.

Prices: from 17/- to 58/- each

Write for full particulars and special terms

WILLIAM TOOGOOD LTD
77 SOUTHWARK ST LONDON SEI



"First-aid in the Home"



**Spools & Tins
of all sizes**

"FIRST-AID," like charity, should usually start in the home, and, in many cases, unlike charity, should stop there.

Why not suggest to your customers a first-aid outfit made up of St. Dalmas plasters and simple bandages which will provide for most slight needs?

People like to be prepared, and an outlay of two or three shillings and a little helpful advice from you will put your customers in a state of readiness to deal with most home accidents.

These are some of our well-known plasters which are used in a large number of hospitals and are invaluable in the home.

"NATIONAL" Rubber Adhesive Plaster

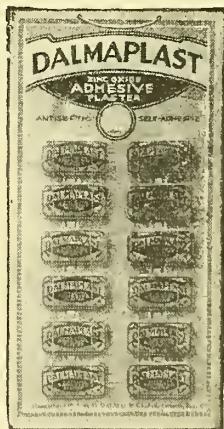
"DALMAPLAST" Zinc Oxide Adhesive Plaster

"LEICESTER" Haemostatic Court Plaster

Also

"NATURAL" Brand Cotton Wool, Lint, Bandages, and all Surgical Dressings.

Write for full particulars and prices.



**A. de St. Dalmas
& Co. Ltd.
LEICESTER**

Established 100 Years.

Φ7

for FACTORY FIRST AID

under the Workmen's Compensation Act regulations
which came into force on JANUARY 1st, 1924.

FRONT EXTERIOR VIEW.



INTERIOR VIEW



**SPECIALLY DESIGNED
FOR EASY ACCESS.
STRONGLY MADE.**

For factories employing less than 50 persons.

CASE NO. 117.

6 No. 1 Finger Dressings. 6 No. 2 Finger Dressings. 6 No. 4 Small Wound Dressings. 6 No. 5 Large Wound Dressings. 6 No. 7 Finger Burn Dressings. 3 No. 9 Large Burn Dressings. 3 $\frac{1}{2}$ oz. Ster. Wool or 6 $\frac{1}{4}$ oz. 1 oz. 2% Iodine Solution. 1 oz. Sal. Volatile. $\frac{1}{2}$ oz. No. 1 Eye Drops. Copy of Form 923.

Price, 22/6 Each.

For factories employing more than 50 persons where separate ambulance room or splint cupboard is provided.

CASE NO. 118.

24 No. 1 Finger Dressings. 12 No. 2 Finger Dressings. 12 No. 4 Small Wound Dressings. 12 No. 5 Large Wound Dressings. 6 No. 7 Finger Burn Dressings. 12 No. 8 Small Burn Dressings. 6 No. 9 Large Burn Dressings. 6 $\frac{1}{2}$ oz. Ster. Wool, or 12 $\frac{1}{4}$ oz. 2 oz. 2% Iodine Solution. 2 oz. Sal. Volatile. $\frac{1}{2}$ oz. No. 1 Eye Drops. Copy of Form 923.

Price, 32/6 Each.

For factories employing more than 50 persons where NO separate ambulance room or splint cupboard is provided.

CASE NO. 119.

Items same as Case No. 118, with the following additions:

6 Ambulance Splints. 2 Rolls, 4 oz. each. Splint Padding. 1 Webbing Tourniquet. 5 yds. 1 inch R.A. Plaster. 6 Triangular Bandages. 4 of each, 1" \times 3 yds. 2" \times 4 yds. 3" \times 6 yds. W.O.W. Bandages. 36 Safety Pins (Assorted). 1 Graduated Measure. 1 pair Scissors. 1 pair Splinter Forceps.

Price, 60/- Each.

Carriage paid on £5 orders in England & Wales.
All prices are subject to alteration without notice.

Robert Bailey & Son, Ltd.
Marriott Street Mills - - STOCKPORT

Phone: Stockport 2794.

Wires: "Undisputed, Stockport"

Workmen's Compensation Act 1923.

N your district there are a number of factories, everyone of which has now to be equipped with **FIRST AID CASES**, and if you are wise you will see that these orders come to you.

It is not only a matter of supplying the original case. These cases have to be kept filled and the most natural and convenient course for the Factory or Workshop owner is that he should get them from the local chemist.

MAY ROBERTS' FIRST AID CASES

have been used in Laundries, Wood Workshops, Foundries, etc., for many years, and the result of our experience is incorporated in the fitment of the new cases. They are guaranteed to be in conformity with the standards laid down by the Home Office for factories employing even a single workman in charge of machinery to those employing 500 men and upwards.

Remember that it is not the case but the refills that makes the new act of so much interest to the trade and realising this do your utmost to secure the order for the case.

It is quite simple—send a postcard to May Roberts stating the number of men employed in the factory you wish to quote and we will let you have price and full particulars.

MAY ROBERTS & CO. LTD.

7/13 Clerkenwell Road, London, E.C.1.
And at DUBLIN, LIVERPOOL & PLYMOUTH.

THE CHEMIST AND DRUGGIST



SUPPLEMENT

42 CANNON ST.
LONDON E.C.4

JANUARY 26, 1924

This Supplement is inserted in every copy of The Chemist & Druggist.

THE SUPPLY OF SUPPLEMENTS.

The clerical work in connection with the posting of spare copies of the Coloured Supplement week by week has increased to such an extent that we have been compelled to reorganise our system of distribution. Our readers will please note, therefore, that, in future, instructions can be accepted for not more than six successive issues of the Supplement at a time, and that in every case

Addressed Wrappers Stamped One Penny

must be sent. Loose stamps will not be accepted.

CLOSING FOR PRESS.

ALL ADVERTISEMENTS INTENDED FOR
INSERTION IN THIS SUPPLEMENT

MUST REACH US
NOT LATER THAN

FIRST POST THURSDAY MORNING.

CHEMISTS' TRANSFERS.

Messrs. Orridge & Co., 56 Ludgate Hill, E.C.
Telephone No.: CITY 2283.

May be consulted at their Offices on matters of Sale, Purchase and Valuation

1.—WALHAM GREEN (Near).—Drug Stores; returns approach £1,100 per annum; under management; scope for increase with the addition of N.H.I. Dispensing; double-fronted shop; good working stock; stock and fixtures estimated by Vendor at over £400; no living accommodation; price £485.

2.—LONDON, N. (Suburban).—Cash Retail Business, with N.H.I. Dispensing; returns, upwards of £20 weekly, at good prices; well-fitted, double-fronted shop, fully stocked; rent, £52 yearly; price £700.

3.—SEVEN SISTERS ROAD (Near).—Neglected Business, General Retail, with large N.H.I. Dispensing connection; returns, £2,500 under management; net profit, £700; scope for large increase; the premises are held on long lease at a moderate rental; valuation terms, or lump sum offer entertained.

4.—LONDON, S.W.—General Retail Business, with N.H.I. Dispensing; returns, about £16 weekly, with scope for increase with additional capital; rent, 35s. weekly; new lease will be granted; price £550, about the value of stock and fixtures.

5.—LONDON, W. (Suburban).—Cash Retail Business; returns, about £3,000 per annum; net profit, between £750 and £800; lock-up shop; held on lease at a rental of £55 per ann.; valuation terms entertained; part payment to suitable successor.

6.—FINSBURY PARK.—Old-established Family Retail Business, offering scope for largely augmented turnover in the hands of a principal; the shop, which is lock-up, occupies a prominent position, and is held on lease, of which there are 12½ years unexpired; the sum of £650 would be accepted for an immediate transfer.

7.—LONDON, S.W.—Developing and Printing connection for disposal; suitable as adjunct to existing Chemist Business; returns last year, £385, increasing; gross profit, £200; price to include apparatus, valued at over £100, £150; want of room reason for sale.

8.—SOUTH COAST (Health Resort).—Dispensing and Photographic Business, in close proximity to all the Hotels; returns, £2,000 per annum, increasing considerably; gross profit, 45 per cent.; large double-fronted shop, elegantly fitted in mahogany and well stocked; Vendor estimates value of stock and fixtures at £2,000; rent, £100 per annum, on long lease; price £2,300.

Messrs. O. & Co. desire to emphasize the necessity of a periodical Statement of Account by which means alone Profit, the value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted and eventually becomes confusion and loss.

9.—YORKSHIRE.—General Retail and Prescribing Business; N.H.I. prescriptions average 2,000 yearly; returns, about £20 weekly; net profit, £400; large corner shop, with ample living accommodation; yard; property may be purchased if required; at present held on lease; price £350.

10.—EAST COAST (Health Resort).—Two progressive modern Pharmacies, returning £1,400 and £2,000 per annum respectively, increasing, at usual prices; both are bold corner shops, fitted in oak and fully stocked, with long leases; the Vendor is willing to sell either Business outright, the prices being £850 for the smaller one and £1,150 for the other, or a Partnership in either concern would be entertained; the sums required to invest would be £300 and £500, according to the investment chosen, the balance being payable by instalments.

11.—BARNESLEY (Within Easy Distance of).—Family Retail Business, at present under the management of lady; returns, £900; single-fronted shop, well fitted and stocked; living accommodation available for immediate possession; rent, 18s. weekly, inclusive; price £400, or near offer; reason for disposal, Vendor bought another business in native town.

12.—SHROPSHIRE.—General Retail Pharmacy, with good Dispensing connection; old-established; returns, 1923, exceeded £2,000, at full prices; the Pharmacy is situate in the main street, and the Vendor estimates the stock to be worth £1,350; 8-roomed house, private entrance, large garden; Vendor wishes to dispose of property for £2,000; price of Business, £1,600.

13.—MIDLANDS.—Mixed Retail Business, with Kodak Agency and Wine Licence; returns, last year, £1,466, under management, present rate a little less; full prices are obtained; small single-fronted shop; rent, £45 per annum; rated on £16; 21 years' lease, with option of purchase; price about £800; stock alone guaranteed at £400.

14.—BERKS.—Country Village Business, with Beer Off-Licence (Bottles only); established 80 years; returns average £1,500 per annum, capable of increase in the hands of an energetic man; double-fronted shop, fairly fitted and fully stocked; no living accommodation; plenty of warehouse room; 21 years' lease at £25 per annum clear; price £750.

Messrs. O. & Co. are prepared to undertake these essential duties and make Special Terms for such services

Valuations for Stocktaking

ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C.4

BERDOE & FISH

WILLIAM S. FISH.

*Valuers and Transfer Agents,
41 Argyle Square, KING'S CROSS, W.C.1*

(One minute from St. Pancras and King's Cross Stations.)

1.—**ESSEX COAST.**—Two high-class modern Pharmacies for sale, in splendid position of rapidly rising district; returns, about £2,000 and £1,400 respectively; long leases; price £1,150 and £850; part can remain, or Partnership arranged.

2.—**EARL'S COURT.**—Old-established Light Retail; present returns, £26 weekly, under unqualified; plenty of scope; rent and rates more than covered by sub-letting; well-fitted shop; price required, about valuation, £750, or offer.

SPECIAL NOTICE TO INTENDING VENDORS.

Messrs. Berdoe & Fish are in immediate want of sound businesses at prices ranging from £700 to £4,000, and cordially invite correspondence. We have a large number of genuine cash buyers waiting and are able to negotiate sales quickly and with the utmost privacy. Our Mr. Fish may be consulted daily on all questions relative to sale, purchase and valuation.

STOCKTAKING VALUATIONS.

We are now booking dates for February at special reduced terms and invite early applications. Our long and varied experience enables us to get through the work quickly and without upsetting the general routine of business.

ESTABLISHED 1870,

Telephone : 651 Museum

The Association of Mfg. Chemists

— LIMITED —

Head Offices : 26-28 Kimberley House, Holborn Viaduct, London, E.C.1 (and at 2 Bixteth Street, Liverpool).

PARKIN S. BOOTH, Accountant and Valuer PHONE : CITY 6942-43
WE HAVE THE FOLLOWING BUSINESSES FOR DISPOSAL.
1.—**SOUTH COAST** (Important Seaside Town).—Handsome Pharmacy, in rapidly growing district; long lease at reasonable rental; returns, £35 per week; scope for great increase; excellent stock; every investigation courted; price £2,200. (98)

2.—**LONDON, S.W.**—Nicely-fitted and well-stocked Pharmacy (Drug Stores); low rental and good lease; returns, about £1,000; qualified man could easily double; possession of good house on completion of purchase; price £830. (101)

3.—**OXON.**—Good-class Market Town Business, with excellent living accommodation; returns, £1,280; new lease; very old-established; price £1,800. (92)

4.—**GLAMORGANSHIRE.**—Well-fitted Pharmacy, in busy centre, with scope for considerable increase; rent, 10s. per week; new lease to be arranged; returns average £20.25 per week; offers invited. (97)

5.—**YORKS.**—Sound Cash Business; turnover, £900 per annum; N.H.I. and Prescribing; living accommodation if required; very low rental; excellent opportunity for beginner; as there is undoubtedly scope for increasing trade; price £500. (95)

6.—**YORKS.**—Old-established Pharmacy, in important town; returns, about £25 per week; large shop and excellent house of 7 rooms, kitchen, 2 attics, etc.; in present hands 18 years; hands me mahogany fittings; price £1,200, all at, for quick sale. (99)

7.—**LONDON.**—Busy shopping centre; returns, £1,250; Kodak Agency, N.H.I.; good scope; lease, 11 years at £85; let off £78; premises consist of shop, cellar, dining room, kitchen and two bedrooms, yard and back entrance; possession of dwelling accommodation on completion; price, £850, or offer. (90)

8.—**LONDON, E.C.**—Old-established Pharmacy, in busy street; profit rental; lease, 12½ years unexpired; returns, £40 p.w., at excellent profits; N.H.I., Kodak, and Ucal Agencies; price £1,200. (102)

9.—**DURHAM.**—Small Pharmacy in important town, established 50 years; returns, now £16 p.w.; could be doubled; stock about £275; low rental; possession of good house; price, for quick sale, £500. (100)

STOCKTAKING.—Perhaps it is too much trouble or you have not the time to spare. Then why not consult the Practical Firm who will do this work for you for a small inclusive fee, without interference with your work? For full particulars write as above.

JOHN BRIERLEY

Valuer, Transfer Agent & Expert Stocktaker

135 Queen St., Newton Heath, Manchester

MANCHESTER. Choice of several sound Chemists and Drug Stores Returning £10 to £30 weekly. Price £300 to £1,200.

Intending Vendors, who wish to sell quickly, write for terms, etc.

THOS. TOMLINSON & SON

CHEMISTS' VALUERS, TRANSFER AGENTS,
AND EXPERT STOCKTAKERS,

45a MARKET STREET, MANCHESTER.

ESTABLISHED OVER HALF A CENTURY.

Telegraphic Address : "Tomtom."

BRETT & CO.

All valuations have the personal attention of F. J. Brett, M.P.S.
TRANSFER AGENTS AND VALUERS,
73 LAUREL ROAD, LEICESTER.

Telephone : 1934.

NOTTS.—£3,000 returns, average for 3 years; Good country Retail, with Grocery; unopposed; Vendor retiring, will live near and assist Buyer; there is ample scope for Agricultural trade.

MIDDLESEX.—£1,200 returns; Good Working-class Cash Retail; low rent, on lease; net profit, over £500; price £900.

YORKS.—£1,500 returns; Good-class, Chiefly Cash, Light Retail, in residential part of large city; very little N.H.I.; Kodak Agency; nice house; can be had on lease; price, about £900.

BUSINESSES WANTED

We have buyers for all sizes and classes of business up to £10,000.

AGENCIES.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

LONDON.—Agents wanted in different districts of London for Teddylax, the popular children's laxative; state exact territory worked; liberal commission paid to men with live connection among Retail Chemists. State full particulars, also other lines carried. Address, Managing Director, Springfield Works, Bishopbriggs, Glasgow.

EXCEPTIONAL OPPORTUNITY for several men already working established connection to secure solo representation of new Loose-Leaf Photographic Albums; only applications from men who can prove ability entertained; no letters answered which do not contain following particulars clearly stated:—1, ground covered; 2, class of trade called on; 3, period between calls; 4, other lines carried; 5, names of firms represented; 6, turnover for last three years; 7, two references; remuneration, which is liberal, by commission only to start with. 92/16, Office of this Paper.

HIGH-GRADE Salesman, having long personal connection with every Chemist in the Home and Southern Counties, desires Agencies with houses of repute possessing progressive marketing policies; advertiser can show proof of records. Apply 37/205, Office of this Paper.

TRAVELLING Representative wanted on commission to work in with present agencies for the Irish Free State by a leading British firm of Photographic Apparatus Manufacturers; must have good connection amongst leading Chemists. Full particulars to 37/202, Office of this Paper.

TO LET.

BRADFORD.—Two Rooms to Let over Chemist's shop (corner position); near City. For particulars apply 91/13, Office of this Paper.

BUSINESSES FOR DISPOSAL.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

DEVEN.—Good Retail Dispensing and Photographic Business; only open 19 months; returns average £30 weekly; heavily stocked; investigation invited; good reasons for disposing of same; price £1,600; rent £150 per annum, on lease to be arranged. 89/37, Office of this Paper.

GLAMORGANSHIRE.—Ucal Family Pharmacy in charming agricultural district; growing; unopposed; mile from sea; established 15 years; summer season; turnover, 1923, over £1,000, which could be doubled by sale of farmers' requirements alone; scope for Optics, Dentistry, Prescribing, Stationery and Photographic Goods; price £750 for immediate disposal. Apply 86/29, Office of this Paper.

LIVERPOOL.—Old-established Cash Retail; Kodak, N.H.I.; turnover, £1,800 a year; gross profit, £700 year; excellent house accommodation, 8 rooms, bath, electric, etc., garage; property leasehold, 33 years unexpired, but renewable any time; small ground rent; price, property and business (including stock, £300), £2,000; mortgage granted up to £1,000. 95/14, Office of this Paper.

LONDON.—Drug Store for Sale, with living accommodation; good reasons for disposal; takings £16 to £20 weekly; price asked £450; no offers. 38/217, Office of this Paper.

LONDON, E. Suburb.—Cash Retail Business, middle-class family trade, small N.H.I.; taking upwards £20 weekly at good prices, under management; could be increased with personal supervision; well-fitted shop; good, clean stock; vacant possession house; lease granted 21 years; rent £55; price all at £750. 94/2, Office of this Paper.

SOUTH Wales, centre important mining district, Cash Retail Business in main thoroughfare; takings £24-28 weekly; good prospects for enterprising man; ill-health cause of disposal; moderate rent; price, stock and fixtures, £800. Apply, 92/11, Office of this Paper.

SOUTH WALES.—Chemist's Business for sale; opening for Optics; turnover £1,300; good prospects; large house, wine licence; good reason for disposal; or Manager, with view to succession. Apply, 92/12, Office of this Paper.

CHEMISTS AND DRUGGISTS.—Old-established Business for sale in best Manchester district, capable of considerable extension; good family and Dispensing connection; sale to include premises in business thoroughfare; freehold and free from chief. Principals only apply Greenhalgh, Sharp & Co., 30, Brown Street, Manchester, Incorporated Accountants.

CHEMIST Business for Sale; unopposed; present hands over 20 years; retiring; trade neglected on account of old age; suit enterprising man; nice house, newly decorated; rent £70; lease 14 years; necessary capital about £600, all at. Call, Owner's Agents, Kellys, 74 Tranquil Vale, Blackheath Village. (Buses all parts of London.)

DRUG Store in busy main road, thickly populated district; returns over £2,000; easily increased; could do large N.H.I.; well stocked; good living accommodation; splendid opportunity for young, energetic, qualified man; corner shop, large windows, three store rooms, three cellars, besides living rooms; price £1,500; reason for selling, leaving the trade. Hankey, Accrington Road, Burnley.

FOR Sale, well-stocked Lock-up Drug Store in S.E. London; good opening for N.H.I. Dispensing; average takings £8 per week; bargain for quick sale, £125. 64/12, Office of this Paper.

FOR Sale, Business; low rent; lease; price about £1,000; particulars on application. 93/20, Office of this Paper.

MODERN Pharmacy, W.C. district, in busy main thoroughfare; turnover £3,500, at good prices; fully stocked; price about £2,500; part can remain; ill-health sole reason for disposal. 89/35, Office of this Paper.

We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents or assistants, or wish to sell their businesses, an Advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement. Instructions and remittances can be sent to us direct or through the advertisers' correspondents in this country.

PREMISES FOR SALE.

MAIN road; modern spacious Business Premises; double-fronted; thorough good house, side entrance; the finest opening for Chemist or modern Drug Stores in the South of London district; no near or strong opposition; position commands immediate business; rent £65-£70; rates £25; similar shops near rented £175; price for vacant possession and 18 years' lease, £750. 93/15, Office of this Paper.

£1,750.—LEASEHOLD; 99 years; ground rent £18 15s.; Randlesdown Road, Bellingham; population 10,000; unopposed; new premises; 25-ft. double-fronted, plate glass; half could be let off at good rent. Stone, Architect, 147 Holborn.

PARTNERSHIPS.

PHARMACEUTICAL Chemist, thoroughly experienced in all branches, Wholesale, Manufacture, Buying, etc., desires partnership or interest in business with view to development. 89/32, Office of this Paper.

PHARMACIST, in large town under two hours from London, unable to give attention to his business, wishes to instal immediately a young qualified man with good all-round experience; minimum capital £400; approximate income £300, to be increased yearly; no living accommodation at present, but exceptional prospect to hard worker and every help given; full details treated confidentially; please state when available. 93/28, Office of this Paper.

BUSINESSES WANTED.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

LANCASHIRE.—Drug Stores or Chemist's Business wanted in good shopping thoroughfare in Burnley, Accrington, Preston, Bolton, Darwen, Colne, Nelson or within easy reach of Blackburn; cash ready; replies treated in strictest confidence. Apply, "Altior," c/o Law, Royal Chambers, Richmond Terrace, Blackburn.

MANCHESTER OR DISTRICT.—Chemist requires Pharmacy with living accommodation, returning about £2,000 a year; replies treated with strict confidence. Reply, "Pharmacist," c/o W. H. Smith & Son, Advertising Agents, Blackfriars, Manchester.

NORTH-EASTERN COUNTIES.—Small Drug Store wanted to rent with house in pleasant district; country preferred; suitable for unqualified man. Post full particulars, which will be treated confidentially, to "Jarrow," 90/17, Office of this Paper.

BUSINESS required in South Wales or West of England; turnover £800-£2,000. Please state accommodation, rent, lease, value of stock, and price. 93/200, Office of this Paper.

BUSINESS wanted immediately, with scope, in good district; £400 down, balance to be arranged; North preferred; must bear investigation; favourable lease necessary. Particulars treated as strictly confidential; with or without living accommodation. 95/3, Office of this Paper.

CHEMIST wishes to purchase sound good-class Business; turnover £2,000-£3,000; preferably with Photographic; Midlands preferred, but not essential; living accommodation not necessary; cash ready; replies treated in strict confidence. "Spero," c/o Messrs. Southall Bros. & Barclay, Ltd., Birmingham.

GOOD sound Business required, with turnover of from £2,000 to £6,000; with house attached preferred, but this is not essential; any locality; must bear every investigation; capital at immediate disposal; bank references supplied. Management with view to succession would be entertained. State full particulars in first letter (in strict confidence). Apply 92/22, Office of this Paper.

WOMAN Pharmacist is open to buy small Pharmacy, Home or Southern Counties; Partnership entertained, or Management with view to succession; alternatively would pay £10 for information (acted upon) suitable locality, with accommodation same, unopposed, seaside or country, growing; £250-£300 available. "Pharmacist," 61 Church Road, Moseley, Birmingham.

SITUATIONS OPEN.**[HOME.]****RETAIL.**

6s. for 40 words or less; 6d. for every additional 10 words or less, prepaid.

DERBYSHIRE.—Qualified Assistant required for middle-class Retail with N.H.I.; no Sunday or holiday duty. Reply, stating age and salary, to 91/16, Office of this Paper.

DEVON.—Wanted, qualified Manager to take entire charge of branch business; age 35 to 40; Optical and Photographic experience essential. Only men with highest references need apply. Stating age, salary required, and experience, to Norman V. Stow, Ltd., Newton Abbot.

E.R. YORKSHIRE.—Qualified Assistant, single, wanted for mixed business in small country market town; state age, height, experience, references, salary required, etc.; recent photo if possible (to be returned). 91/15, Office of this Paper.

HAMPSTEAD.—Experienced unqualified Assistant required at once for Front Counter; must be of good address and used to good class Dispensing Business. Apply, Stamp, 29 High Street, Hampstead.

HAMPSTEAD.—Wanted, a Part-time Assistant for high-class Family Business. Apply, with full particulars, to "Pharmacist," 94/5, Office of this Paper.

LONDON HOSPITAL, WHITECHAPEL, E.—Clerk required in the Dispensary; salary £5 per week; preference given to candidate with some experience of clerical work in the Drug trade; hours 9 to 5. Apply by letter only, in own handwriting, stating particulars of age, experience, and military service, to the Pharmacist.

LONDON.—Wanted, young, qualified Assistant with thorough knowledge of Dispensing and Photography; tact and prefered. Apply, stating particulars, to Bunker, 151 Lillie Road, S.W.6.

LONDON, N.—Smart Junior wanted for good-class Dispensing and Photographic Business. Full particulars, with photo and salary required, 93/31, Office of this Paper.

LONDON, N.W.—Fully qualified Chemist required as Buyer of Perfumery and Drugs; Store experience absolutely essential. Apply, by letter only, stating age, experience, and salary required, Managing Director, John Barnes & Co., Ltd., 191/217, Finchley Road, N.W.3.

LONDON, N.W.—Qualified, experienced Dispenser, etc., middle-age; permanent post to good man; moderate salary. Apply, with full particulars as to age, experience and salary required, to 95/10, Office of this Paper.

LONDON, W.—Qualified Assistant (outdoors) to take charge of branch in poor locality; knowledge of Photography essential; must be sober, honest and painstaking; age about 28 to 40; state salary required and give references in first letter. 91/5, Office of this Paper.

LONDON, S.W.—Chemist-Optician requires an Assistant with good knowledge of Sight-testing and Frame Fitting; one with an Optical Diploma preferred. "F.S.M.C." 91/9, Office of this Paper.

LONDON, S.W.—Manager required for business in working-class neighbourhood; good opportunity for energetic man with initiative; highest references essential; salary, commission, with house. Apply 38/215, Office of this Paper.

LONDON, W.2.—Junior Assistant, male, unqualified, for Dispensing, Stock, and occasional Counter; previous experience in good-class Dispensing business essential; knowledge of Photography. Full particulars, age, height, experience, and salary expected to H. F. Stapley (Moore & Co.), 45 Craven Road, W.2.

RHYL.—Wanted, Junior Assistant or Improver immediately. Apply, stating age, experience and salary required (also photograph if possible), Ashfield, Chemist, Rhyl.

SHEFFIELD.—Chemist requires at once lady, 25-30; must be a competent Dispenser and used to Counter. Write, giving full particulars of experience and salary required, to 92/59, Office of this Paper.

SOUTH COAST.—Smart Junior or Improver required at once for quick Retail business. Reply, with full particulars, stating age, salary required (photo if possible), 95/20, Office of this Paper.

NAMES AND ADDRESSES.

When sending advertisements for any of the sections in this Supplement, advertisers—as a guarantee of good faith and not necessarily for publication—should always give their names and addresses. It sometimes occurs that this rule is not followed and delay and disappointment ensues. Strict attention to this detail will be appreciated.

A RELIABLE Junior wanted, unqualified, over 21; used to a good class business and Dispensing; please give experience, age, and salary required. Middleton & Co., Ltd., 11 Linthorpe Road, Middlesbrough.

A SSISTANT, unqualified, required, used to good-class Family Business; Dispenser and Window-dresser; smart Counter-man; age not over 30. Apply, with full details, to 38/211, Office of this Paper.

A SSISTANT, immediately, ago 30-40; good all-round man; tall and active; must be a smart, competent Salesman and possess a good knowledge of practical Kodak Photography. State full particulars as to previous experience, age, height, qualification, salary, etc. Chater, Chemists, Watford.

A YOUNG man as Learner wanted for Photographic Department. Apply Newmarch, 25 Newington Butts, Elephant and Castle, S.E.

F. RIMMINGTON & SON, LTD., 9 Bridge Street, Bradford, require a qualified Assistant as Branch Manager, with experience in good-class Retail and Dispensing. State full particulars, with age, height, and salary required (outdoors).

JUNIOR Assistant; sound knowledge of Dispensing and Photography essential. Full particulars to Cumming, Chemist, 146 Egleston Road, Crewe.

JUNIOR for S.W. London; must be well up in Dispensing. Usual particulars, etc., to 92/32, Office of this Paper.

LOCUM wanted for three weeks, February 14; recent testimonials must be good; gentleman residing near preferred. Kirkland, Chemist, Crickhowell, Breconshire.

MALE Assistant as Junior for high-class Dispensing and Retail; permanency for energetic and competent Assistant; salary, references, and enclose photo in first letter. D. R. Harris & Co., 30 King Street, St. James, S.W.1.

MANAGER, for a London suburb; must be thoroughly experienced and absolutely reliable. Please state age, height, salary, experience, etc. Applications not answered by January 30 kindly declined. 95/25, Office of this Paper.

OUTDOOR Vacancy for young man; good Store-keeper and Light Goods Packer; for retail; able to help in shop; hours 9 to 6; salary 45s. week; apply personally; similar experience necessary. Evans, Chemists, Dunsmure Road, Stamford Hill, N.

PHARMACIST wanted immediately for N.H.I. Dispensing; evenings, 6-9.30; no Sunday duty; must be quick and accurate Dispenser. Apply, give usual particulars as to salary, also copies of references, P.C.B. 59/5, Office of this Paper.

QUALIFIED Assistant wanted at once; good experience necessary; must be accustomed to modern trading. Apply T. A. Harrison, 534 High Road, Goodmayes.

REQUIRED, at once, young lady Assistant for Counter, Stock and Window-dressing; knowledge of Photography essential. Apply De-Pearc, 14 Highbury Park, N.5. Applications not answered within a week respectfully declined.

REQUIRED soon, qualified, to take solo charge of branch recently opened; salary and commission basis. Reply to 94/19, Office of this Paper.

TIMOTHY WHITE CO., LTD., are opening several new branches in the South of England, and require first-class Pharmacists as Managers; permanency and good prospects. Apply, Secretary, Timothy White Co., Ltd., Portsmouth.

UNQUALIFIED, male, 20-30; good Dispenser; state age, height, experience, and salary required; outdoors; January 28. R. Glaister, 49 Abbey Road, London, N.W.8.

WANTED shortly, young, qualified, to manage branch in Kent; knowledge of Photography essential. References, photo and usual particulars, to 88/32, Office of this Paper.

WANTED, young Lady Assistant, outdoors; qualification not essential, but must be competent Dispenser, and have cod retail Counter experience, with knowledge of Photographic plates; state age, height, salary, experience; photo; no testimonials; Essex; permanency. "L." 91/23, Office of this Paper.

WANTED, unqualified Assistant, with good experience in Dispensing and Counter; male; outdoors; 22 to 35; personal application preferred. A. J. Baker, 34 High Road, Willesden Green.

WANTED, a smart Junior or Improver, of good address and appearance; Welsh speaking. Write full particulars as to salary, experience, etc., with photograph, to Griffiths & Co., Chemists, Pontardawe.

WANTED, part-time Dispenser (male); hours, 9.30 to 12, 5.30 to 8.30; must be competent and of sober habits. Apply P.C.B. 38/33, Office of this Paper.

WANTED, immediately, Junior (outdoor). Please state full particulars to Thos. Evans, Chemist, Putney.

WANTED, capable Manager at once. Rees & Warren, Barry Docks, S. Wales.

WANTED, a qualified Manager for South Lancs. to take complete control, and who is prepared to invest £100. State full particulars and when disengaged, to 95/19, Office of this Paper.

£6 PER WEEK AND COMMISSION.—Qualified; well educated; married; good living accommodation available; family business; pleasant suburban district; 20 miles Kings Cross. Apply, with full details, to 38/210, Office of this Paper.

WHOLESALE.

6s. for 40 words or less; 6d. for every additional 10 words or less, prepaid.

LANCASHIRE Firm of Manufacturing Chemists require an experienced Traveller to call upon Doctors and Chemists; qualified man preferred. Reply, giving full particulars as to age, experience, and proof of selling ability and salary required, 95/23, Office of this Paper.

SCOTLAND.—Resident Representative required for Scotland for high-class well-known French Perfumery for Chemists and Stores and Toilet articles for wholesale Sundriesmen; existing connection handed over; expenses and commission. Full particulars to P.C.B. 38/15, Office of this Paper.

A WELL-KNOWN firm of Proprietary Articles have a vacancy for a qualified Chemist with manufacturing experience to act as Manager. State experience and salary required. P.C.B. 38/9, Office of this Paper.

DRUGGISTS' Sundries, Surgical Appliances, Dressings, etc., etc.; Provincial House require the services of a young fellow for this department; state age, experience, and salary required. 38/212, Office of this Paper.

FIRM of Malt Extract Manufacturers require the services of a competent Foreman; applicant must thoroughly understand the manufacture of Malt Extract and Malt and Cod Liver Oil for Pharmacists' requirements, also the manufacture of Malt Extract for Textile and Brewers' requirements; good salary and a permanent position is offered to suitable applicant. Apply, giving details of experience, etc., P.C.B. 38/16, Office of this Paper.

JOHN RICHARDSON & CO., LTD., require an experienced Representative for the Counties of Essex, Suffolk, Norfolk and Lincolnshire, where they have a long-established connection. Applicants, preferably not over 40 years of age, will please write to 10 Friar Lane, Leicester, giving full details of qualifications, experience, ground previously covered, age, and salary, exclusive of travelling expenses.

OPPORTUNITY to be trained as Representative occurs on the staff of a City firm dealing in high-class Chemists' Sundries; applicants to be about 25 years of age, of good appearance and education, and must possess natural selling instincts. P.C.B. 38/35, Office of this Paper.

REPRESENTATIVE required for part London and Home Country by old-established Chemists' Sundry House; liberal remuneration (£300 per annum minimum) for suitable man. Apply, stating age and experience, 38/214, Office of this Paper.

REPRESENTATIVES wanted for London and suburbs, commission and part expenses, to carry well-known side line; no samples; must have sound connection among Chemists, Stores and Wine Merchants; splendid opening for men with progressive ideas. 37/209, Office of this Paper.

REQUIRED, gentleman for Chemical Business in London; must have thorough knowledge of the trade and connection amongst the largest Buying Houses and Agents; must also know the best and cheapest sources of supply; to one having these capabilities a good position is assured. State full particulars of past and present occupation, age and salary required, which will be treated in strict confidence, to 37/207, Office of this Paper.

SURGICAL Assistant wanted. State age, experience, and wage required. Sayers, Silcox, Cuzner & Co., Ltd., 15 Prospect Street, Hull.

WANTED, good-class live Representatives to handle Tablets and Packed Lines, on commission only, in following districts:—

1. Yorkshire and Lancashire,
4. Cheshire, Shropshire, and Hereford,
5. Lincolnshire, Rutland, Northamptonshire, Bedfordshire, and Huntingdon,
8. Oxford, Gloucestershire, and Berkshire,
11. Sussex, Surrey, and Kent,
13. North Wales.

Apply 37/206, Office of this Paper.

WANTED by firm of Surgical Rubber Manufacturers, several experienced Travellers with sound connection amongst Chemists' territories: London, Eastern Counties, and South Wales. Reply, stating fullest particulars, 38/213, Office of this Paper.

WET Counter Hand for London Wholesale Druggists; must be thoroughly experienced; give full details of experience. 37/208, Office of this Paper.

YOUNG man wanted by London Patent Medicine and Sundry House; knowledge of Wholesale essential, and experience in dealing with returns desirable; good opening for intelligent and active man. Write, stating age, experience, and salary required, to P.C.B. 38/31, Office of this Paper.

SITUATIONS WANTED.

RETAIL.

[HOME.]

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

A.A.A.—ASSISTANT or Manager, Drug Stores; unqualified; married; 30; thoroughly experienced all departments; Counter, Dispensing, Windows, Stock-keeping and Photography; excellent references; capable taking charge; desires change; West of England preferred. 92/21, Office of this Paper.

A.—AS Locum.—Miss Grace Rennie, Pharmacist, now booking. A. 16 years' Hospital, Retail experience; highly recommended; free now. 61 Church Road, Moseley, Birmingham.

A.—ASSISTANT; smart, good appearance; good Salesman, Dispenser, etc.; accustomed take charge; excellent references; unqualified. Powell, 29 Lances Read, Hounslow.

A LADY Assistant (25), Minor, 6 years' good Dispensing and general experience, requires position, London, Oxford or South Midlands preferred. "M.P.S.", 36 Stratford Street, Ifley Road, Oxford.

A RIGHT-hand Man, competent and energetic, abstainer, unqualified, desires post, Manager or otherwise, where mutual interests would be considered; exceptional references. "Radix," 41 Selwyn Avenue, Richmond, Surrey.

PHOTOGRAPHS, TESTIMONIALS, &c.

When answering advertisements in this section applicants are strongly advised not to send (unless specially requested) ORIGINAL TESTIMONIALS or VALUABLE PHOTOGRAPHS. As can be readily understood, when an advertiser receives from 60 to 100 replies the task of returning photographs, testimonials, &c., is one of some difficulty.

ACTIVE, steady, reliable Manager; qualified, 1911; accustomed to full charge; good London experience and references. 93/250, Office of this Paper.

AGE 24; qualified; disengaged; seven years' experience Dispensing, Counter, Photographic and Veterinary; Bristol preferred. A. J. Ward, Upper Stratton, Swindon, Wilts.

Able Assistant, aged 24, qualified, height 5 ft. 11 in., disengaged, requires responsible position. P.C.B. 38/28, Office of this Paper.

An unqualified Assistant, young, energetic, single, tall, willing, of good appearance and address, 8 years' good Counter and Dispensing experience, desires position during the holiday season on the East or South Coasts; replies confidential. 93/16, Office of this Paper.

ANY Doctor, or Secretary of Institution, requiring reliable experienced Dispenser; very moderate salary. Please write, "Beta," 108 Lower Richmond Road, Putney, S.W.

ANY responsible position by keen Salesman; 33; qualified; 17 years' experience in all branches. P.C.B., 39/2, Office of this Paper.

APPRENTICESHIP required by girl of 17; passed Preliminary. Newson, 40 Queen's Road, Twickenham.

ARECENTLY qualified Pharmacist requires situation; Square trained; age 24; height 5 ft. 10½ ins. Write 38/280, Office of this Paper.

As Manager, view succession; Pharmacist; 48 years; tall; active; cash available £500; small living accommodation and security of tenure essentials. "Pyro," c/o 3 Brooklands Cottages, Chester Road, Whitechurch, Salop.

As qualified Assistant; permanent or temporary, or Manager or Locum; town or country; distance no object. Burton Middleton, 20 Morton Avenue, Chiswick, London, W.4.

ASISTANT, 21, seeks post, Counter and light Dispensing; 7 years' previous experience; good references. 91/22, Office of this Paper.

ASISTANT seeks engagement; 34; single; 12 years' experience, Retail, Dispensing, Photography; London or South Coast preferred, but not essential. "A," 44 Oseneys Crescent, Kentish Town, N.W.5.

ASISTANT; unqualified; 10 years' experience; excellent references. H. Giles, 5 Leamington Road, Southend-on-Sea.

ASISTANT or Manager, Drug Store; unqualified; middle-aged; very active; capable Prescriber and Counterman; excellent references; could invest £60 in business; moderate salary; permanent. "Rhei," 93/22, Office of this Paper.

ASISTANT or Senior (Hall); 16 years' West-End and provincial experience; apprenticed in first-class Dispensing business; disengaged; residing in London. 93/27, Office of this Paper.

ASISTANT; qualified; speaking French; best experience; London or suburbs. "T," 4 Kenilworth Court, Putney.

ASISTANT; unqualified; 21; good Dispenser, Salesman, and good knowledge of Photography; excellent references. Clifford Hughes, 23 Carlton Avenue, Barrow-in-Furness.

ASISTANT; experienced; disengaged; unregistered. "Radix," Hawthorn Villa, Lusop Hay, Ilkreford.

AT Once.—My services are available for Dispensing, Counter work and Photography; Veterinary and Surgical experience; studying Optics; excellent references from London and Midlands. Apply, with particulars and salary in first letter, D. Douglas, 30 Roe Street, Macclesfield, Cheshire.

BOURNEMOUTH or near, about March-April; unqualified 23; 4½ years' experience in good-class trade; competent Dispenser; energetic; used to responsibility; interview arranged "F. X.," 56 Arlington Road, Surbiton.

CHARGE of small branch, or Shop Relief; Locum or Dispensing; qualified; 50; capable; good, varied experience aptitude. "Chemist," 73 The Green, Mountsorrel, Leicester.

CHEMIST and Optician; Manager; young, good appearance energetic; used to control of staff; thorough experience in both branches; possessing both Optical qualifications. "Ajax," 93/10, Office of this Paper.

CHEMIST'S Assistant, unqualified, desires situation in Dispensing and Counter business; age 35; height 5 ft. 8 in. London or suburbs preferred. 94/20, Office of this Paper.

COUNTER Hand Dispenser, young lady (aged 23); excellent West-End experience; knowledge of Photography; good Saleswoman; free now. "Don," 32 Burton Street, W.O.

CUT This Out.—Anywhere, at any time, for any period; qualified; exceled service; clients twelve English Counties moderate terms. Write or wire, "Chemist," 21 Priory Park Road, N.W.6.

DISENGAGED.—Dispenser, 28; Counter and Photographic D. and P., Window-dressing, Book-keeping; good references. Roberts, 5 Clifton Terrace, Barnstaple, N. Devon.

DISENGAGED.—Qualified Chemist; Locum, permanent; accurate and rapid Dispenser; excellent references "Statim," 60 High Street, Stoke Newington, N.

DISPENSER (woman), Hall certificate, desires post, Doctor or Institution; experienced Hospital and Dispensary; Book-keeping or other duties if required. 91/24, Office of this Paper.

DISPENSER, lady, Hall, experienced, or Dispenser-Secretary; Typewriting; daily whole or good part time. 48 Buckleigh Road, Streatham.

DISPENSER and Book-keeper; part-time or Locum; Chemist or Doctor; qualified; Photography; outer Western suburb or Home Counties. 93/25, Office of this Paper.

EFFICIENCY and Reliability.—Chemist, pre-war qualification, tall, good education and address, excellent London and provincial experience, Photography, Optics. Desires Management. Kindly state approximate salary offered and if with accommodation. 94/12, Office of this Paper.

EXPERIENCED lady Dispenser, 8 years Hospitals and Series, desires Locum or part-time; excellent testimonials. Apply 88/5, Office of this Paper.

GENTLEMAN, qualified, would like position as Manager or Senior in a month or two in or around Bridlington. Apply 95/17, Office of this Paper.

GOOD berth required; permanency; nearly 20 years' varied experience; good knowledge Photo, smart Counterman, sell anything; 37; tall; married, no family; business builder; taken charge; highest references; start at once. T. F. Johnstone, Heath Lodge, Watford Heath.

JUNIOR, 21, now disengaged, seeks situation for further experience; Portsmouth district preferred. S. Giffin, 98 Monmouth Road, Portsmouth.

JUNIOR Assistant, 20, seeks opening; good all-round experience; tall, keen, and well recommended. 93/30, Office of this Paper.

LADY Dispenser (Hall Certificate), good references and experience, wants post, London or Cirencester neighbourhood. 73/35, Office of this Paper.

LADY Dispenser (Hall); experienced; part or full time; good testimonials; moderate salary. Offord, 15 Tillotson Read, Ilford, Essex.

LADY requires post with Doctor; first-class experience Dispensing and Book-keeping. 90/38, Office of this Paper.

LADY Dispenser (Hall) requires post; 3 years' experience, all branches of Dispensing. Dicks, 13 Manse Road, N.16.

LOCUM; 20 years' all-round town and country experience; thoroughly competent, reliable, industrious; well recommended; Stocktaking throughout undertaken at lowest terms; disengaged. "Rhei," 239 Camberwell New Road, S.E.5.

LONDON.—Qualified man as Manager or Part-time; abstainer; capable and reliable. Thomas, 145 Kennington Park Road, S.E.11.

MALE Dispenser seeks post with a Doctor; accustomed to dressings; state terms. 89/34, Office of this Paper.

MANAGER, thoroughly experienced, energetic, requires post, London; qualified; age 28; best references. "Statim," 26 Wrentham Avenue, Kensal Rise, N.W.10.

MANAGER, extensive experience, Front Counter, Buying, Dispensing, Photographic, Optical, wishes change to a really brisk cash business where one or two Assistants are kept and opportunities exist for advancement; City or busy suburb. "Velox," 90/1, Office of this Paper.

MANAGER; energetic; experienced; reliable; good Salesman, Prescriber; permanent or Locum; unqualified; disengaged. Address "G. T.", 14 Hubert Grove, Stockwell, S.W.9.

MANAGER or Assistant; Scotsman; qualified; single; 29; height 5 ft. 8½ in.; smart appearance; good all-round experience; trustworthy; capable; London or S.W. England. Pope, 25 High Street, Glastonbury.

MANAGER; qualified Pharmacist; married; high-class Dispensing and Retail, also Photography; over 20 years' experience in all branches of Retail; used to control; living accommodation preferred, in London district. 92/40, Office of this Paper.

MANAGER or Locum; all-round experience; reliable; first-class Salesman; excellent references; disengaged. "D.", 93/14, Office of this Paper.

PART-TIME position required, Monday, Tuesday, Friday, Saturday; N.H.I. Dispenser; unregistered; experienced. Apply, "Rhel," 36 Whatman Road, Honor Oak Park, S.E.23.

PART-TIME situation required evenings, Saturdays, half-day if necessary; good references. "Radix," 1 Beechmore Road, Battersea Park, S.W.11.

PART-TIME Assistant, London; West-End Dispensing, Counter experience; excellent references. "R.", 93/29, Office of this Paper.

PHARMACIST's son, recently qualified (Square trained), seeks situation in good-class business; age 23; height 5 ft. 10½ in. Write, Spyvee, Pharmacist, Sleaford.

QUALIFIED, 32, desires post, London or near; good experience in middle-class country business; careful Dispenser. 91/11, Office of this Paper.

QUALIFIED (lady), Scotch, 11 years' experience (three years Manager), desires post, London. P.C.B. 38/10, Office of this Paper.

QUALIFIED Manager, 28, tactful and obliging, all-round experience, high-class and working-class, desires appointment as Manager or Assistant; London or provinces. "Business," 90/5, Office of this Paper.

QUALIFIED requires evening work, N.H.I. Dispensing or Manager; experienced all branches; North London or West-End. P.C.B. 38/34, Office of this Paper.

QUALIFIED, 29, requires part-time, or one or two hours free weekly for study. Apply "Chemist," 90 Lansdowne Road, Clapham, S.W.8.

QUALIFIED, 35, married, desires management in provincial town where all-round ability, initiative, and faithful service will be given full scope; Photography, Optics, Wireless; 10 years' experience as Manager; excellent references. Grimshaw, 186 High Road, Wood Green, London.

QUALIFIED; elderly; Hospital or Institution; 11 years' Hospital experience. "Chelsea," 22 Bramerton Street, Chelsea, S.W.3.

QUALIFIED Chemist, 46, desires position as Manager of good-class business in London; experienced Buyer, business builder, prize Window-dresser; Photographic and Optics. Elliott, 145 Oxford Street, W.1.

QUALIFIED lady, Minor, desires post; London; 11 years' excellent all-round experience. "Chemist," 36 York Street, Baker Street, W.

QUALIFIED, Locum or permanent; accustomed to Store business; London only; moderate salary. "Pharmacist," 1 Abbeville Road, S.W.4.

QUALIFIED, 33, seeks permanency as Manager, or view to succession. "Statim," 44 St. James' Street, Leeds.

QUALIFIED, 24, good general experience, seeks post in West End, 92/38, Office of this Paper.

QUALIFIED, 25, good Counter and Dispensing experience, excellent references, desires situation in Staffs. Apply, 93/17, Office of this Paper.

QUALIFIED, 29, careful and accurate Dispenser, some experience good-class Retail, private and N.H.I. Dispensing, and Photographic, at present Hospital Dispenser, seeks opening in Retail, anywhere, near London preferred; moderate salary. "R." "Copthorne," Windmill Road, Clapham Common.

QUALIFIED.—Manager or Assistant; tall and of good appearance; excellent all-round experience; Photography; knowledge of Optics. 93/34, Office of this Paper.

QUALIFIED, young, 9 years' experience, seeks position as Assistant or Manager; disengaged. 93/36, Office of this Paper.

QUALIFIED lady desires post; accurate Dispenser; thorough experience all branches Retail; London essential. 19 Netherwood Road, W.14.

RE-ENGAGEMENT desired by young man; 3½ years' good all-round experience; age 20; first-class reference; disengaged middle of February. Folkard, 11 The Grove, Clacton-on-Sea.

R. H. EVANS, Pharmacist, Llandrindod Wells, can recommend his qualified Assistant, 27; accurate Dispenser, good Counterman; tall; abstainer; thoroughly trustworthy; Locum accepted.

SUNDAY WORK, 3 in 4, wanted by up-to-date, unqualified Assistant; Second Assistant in large suburban business; height 6 ft.; age 22; any branch, any hours. 91/10, Office of this Paper.

SUPERINTENDENT, with part-time services preferred; Minor man. 94/1, Office of this Paper.

UNQUALIFIED, middle-aged, single, active, honest; 26 years' good all-round experience; good references. "Beta," 90/40, Office of this Paper.

UNQUALIFIED Manager, Assistant or Locum; good experience and references; tall, active, good appearance; disengaged. "R." 33 Hailsham Avenue, Streatham Hill, London.

UNQUALIFIED seeks situation in Drug Stores, view succession. Full particulars, salary offered, etc., to 89/36, Office of this Paper.

UNQUALIFIED Assistant, 20; height 6 ft.; good all-round experience, Dispensing, Counter, Photo and excellent Window-dresser; Midland post preferred; excellent references. E. P. Northover, 72 Glasgow Street, Northampton.

YOUNG, Lady (Apoth. Hall and Part I); three years' experience in Hospital and with Doctor, requires two years' Apprenticeship in high-class Pharmacy. "M. O. D." c/o College of Pharmacy, Bath.

YOUNG lady, qualified, requires part or whole time or day engagements; Dispensing, Window-dressing; taking charge. 93/5, Office of this Paper.

YOUR Opportunity.—A Manager who can manage; exceptional Salesman; qualified; private and multiple store experience; good Buyer; thorough knowledge of best markets; 28; 6 ft.; Manchester or suburbs. "Misere," 86/23, Office of this Paper.

YOUNG Lady M.P.S. desires post, London or suburbs; five years' Retail experience; moderate salary. "Pharmacist," 151 Philip Lane, Tottenham.

WHOLESALE.

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

A DVERTISER, experienced Sales Manager to well-known Drug House, all-round experience as Buyer, Salesman and Travelling Representative, now disengaged, desires correspondence with view further appointment. 95/22, Office of this Paper.

A THOROUGHLY experienced Tablet-maker and Coater, age 30, requires situation, anywhere, home or abroad; good timekeeper, energetic and trustworthy; plant maintenance; knowledge also Toilet lines; prepared to study employer's interest generally. 93/40, Office of this Paper.

A NALYTICAL Chemist, 35; 4 years' war service; educated Public School; B.A., Inter B.Sc. Engr. and Chemistry; some experience as Chemist and Assistant Manager, Paper Mills; willing to take any post. M.L. 1606/23, Office of this Paper.

B.Sc., Honours Chemistry, desires position as Analytical or Research Chemist; capable assisting other departments, especially publicity field; has managed advertising agency; knowledge modern languages; moderate salary; highest references. P.C.B. 38/57, Office of this Paper.

CHEMIST (Research or Works); 23; B.Sc.(Lond.), A.I.C.; some experience as Pupil Assistant, Public Analyst and as Analyst with fine Chemical Manufacturers. M.L. 25833, Office of this Paper.

CHEMIST and Works Manager open for early appointment; 10 years' Analytical and Bacteriological Laboratory work; considerable commercial and travelling experience. P.C.B. 36/29, Office of this Paper.

CHEMIST'S Agent; live representation Yorks; highly recommended by leading firm; salary and expenses. Adams, 16 Waverley Terrace, Leeds.

CHEMISTS' Showcard Writer seeks berth; own studio and plant; £3 week. James, 6 Sainfoin Road, Balham.

EX-OFFICER, A.I.C., 43; married; educated Public School; good knowledge French; one year's experience Assistant to Analytical Chemist, eight years Manufacturing Chemist; willing to take any post. M.L. 5977/22, Office of this Paper.

LADY desires post Wholesale House, London; Hall certificate; experience Wholesale, Dispensing and National Health pricing. Apply, "Miss G.", 21 Northolme Road, Highbury, N.5.

LADY Supervisor desires position; thorough knowledge all kinds Packed Goods; reliable; good references. "K.", 2 Roxley Road, Lewisham, S.E.

M.S.C. (HONS.), B.Sc. (1900) 44, desires Chemical, Metallurgical or Commercial post; experience as Chief Chemist and Manager of Chemical Manufacturing Company, also as Chief Chemist and Metallurgist in Metal Company; sound experience all branches; is willing to take any post suitable to qualifications. M.L. 71755, Office of this Paper.

RESEARCH Chemist, 28, married, 4 years' war service, B.Sc., some French, desires post in connection with operation of Chemical Plant; sound knowledge Chemistry, Physics, Maths, and Chemical Research; 7½ years' experience in charge of research plants. M.L. 5029/23, Office of this Paper.

TRAVELLER, live, old-standing connection Chemists, Bristol to Penzance, first-class Salesman, excellent record, wishes represent one (possibly two) houses that district; well known all best buyers; returns guaranteed; qualified Chemist; expert all branches; solely commission basis not entertained; first-class references. "G. F. S.", 19 Wolseley Terrace, Mutley, Plymouth.

UNQUALIFIED Assistant, 24, tall, desires position in Drug-gist Sundries House, with view to representing; excellent references, character and ability; pushing. 91/14, Office of this Paper.

WORKS or Research Chemist, 29; educated Public School, B.A., Cambridge (Exhibitioner); some knowledge French, Italian; willing to take any post. M.L. 2499/22, Office of this Paper.

WORKS Chemist (Manager or Assistant Manager), 32; educated Public School; fair knowledge French and German; good knowledge of Seed Crushing, Oil Extraction Refining, Bleaching, Deodorising Oils, Solvent Extraction Plants costing and control of stores. M.L. 5538/23, Office of this Paper.

YOUNG Gentleman, 28, requires position as Representative to Wholesale House, having had several years' experience excellent references. 88/3, Office of this Paper.

£1 A WEEK for running expenses secures services of Representative with autocar; Sussex and Kent. "A. A.", 94/6 Office of this Paper.

[COLONIAL, INDIAN AND FOREIGN.]

ENGLISH lady Dispenser (Hall certificate) wants post, Paris or neighbourhood. 73/350, Office of this Paper.

QUALIFIED, age 29, desires post abroad, as Manager; China (preferred), India, South Africa. Apply, "Fe," 90/34 Office of this Paper.

MISCELLANEOUS.

10s. for 60 words; 1s. for every additional 10 words or less.

PHARMACY Fittings, Drug Fittings, Dispensing Screens, Wall Cases, Counters, Silent Salesmen, Showcases; bargain prices. Write inquiries. PHILIP JOSEPHS & SONS, LTD., 93 Old Street, London, E.C.1.

SECOND-HAND CHEMISTS' FITTINGS.—We have an exceptionally fine selection of these in all sizes; prices are right and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, RUDDUCK & CO. 262 Old Street, London, E.C.2.

CHEMIST'S Fittings (second-hand).—Ranges of Drug Drawers Shelving, All Glass Counters, Centre Cases, Window Fittings of all descriptions. D. MATTHEWS & SON, Chemist Fitters, 14/16, Manchester Street, Liverpool.

LIMITED COMPANY FORMATION.—Before placing your Company in other hands, get my quotation. I specialise in Chemist and tradesmen private companies and quote inclusive charge; no extras. A. B. Slack, 180 Garston Old Road, Liverpool.

MAHOGANY CHEMISTS' FITTINGS.—Complete Drug-fittings, 48 drawers, 12 ft. long; Wall Case, 8 ft. long Dispensing Screens, 7 ft. and 6 ft. 6 in. long; Glass Case-framed Counters, 12 ft., 10 ft., and 8 ft. long; Perfume Case and Desk 2 ft. 4 in. Nests, Counter Drawers; shop-soiled; low prices. GEORGE COOK, Shop Fitter, 29 Macclesfield Street, City Road London, E.C.

PERFUMES, Eau de Cologne and Lavender Water; new Xmas, 1923; Zenobia, about £80 worth; Yardley, about £60 worth; Houbigant, £20; all less 33½% and 10%; carriage paid minimum £5. BRYAN & SPEDDING, LTD., 30 Deansgate Arcade, Manchester.

EXCHANGE COLUMN.

2d. per word: Minimum 2s.

FOR DISPOSAL.

ABOUT 5 GROSS 2-oz. Round Amber-tinted Glass Stoppered Bottles; what offers? Walls, 96 Caunce Street, Blackpool.

BEST OFFERS.—14 lbs. Ess. Vanilla Extra; 6 x 28 lbs. Glucose; 2 cwt. Pulv. Amyli. Patterson, Chemist, 91 Union Street, Oldham.

WANTED.

PHARMACEUTICAL Books wanted; send priced list. Gower, Bookseller, 41 Voltaire Road, Clapham.

RADIUM SALT, pure of Residues, old Applicators, etc. Apply Harrison Glew, Radium Laboratories, 156 Clapham Road, S.W.9.

KODAK or other good make of Projection Printer; also a Fogging or Numbering Machine for films, and Drying Machine for prints. Treloar & Co., 61 Denmark Hill, S.E.5.

GENERAL PRACTICE' X-RAY APPARATUS
COMPLETE WITH ALL ACCESSORIES £230

"RADIOLUX" HIGH FREQUENCY APPARATUS
COMPLETE WITH FOUR APPLICATORS AND CARRYING CASE £6:10:0

THE GALVANOSET
FOR IONISATION, GALVANISATION, FARADISATION, ETC. ETC. £12:12:0
FARADISATION ATTACHMENT EXTRA £2:12:6.

THE "EQUATOR" DIATHERMY APPARATUS
FOR MEDICAL OR SURGICAL REQUIREMENTS. £48:15:0

PROFESSOR BERGONIE'S APPARATUS.
FOR THE TREATMENT OF OBESITY, CARDIAC DERANGEMENTS AND ALL CONDITIONS ARISING FROM DEFICIENT ELIMINATION.
PRICE OF COMPLETE OUTFIT. £152:16:0

WHOLE BODY RADIANT HEAT AND LIGHT BATH, COMPLETE WITH RECLINING COUCH. £61:10:0

VIBRATORY MASSAGE APPARATUS
FOR DIRECT OR ALTERNATING CURRENT. £5:10:0
COMPLETE WITH APPLICATORS AND CARRYING CASE.

ADJUSTABLE LIGHT BATH.
FOR JOINTS OR LUMBAR REGION, ETC. £8:0:0.

ULTRA VIOLET RAY APPARATUS
TUNGSTEN ARC COMPLETE WITH RHEOSTAT FOR DIRECT CURRENT. £27:10:0

DR. BRISTOW'S COIL
£6:5:0 COMPLETE

GALVANIC BATTERY
FOR IONISATION 24 CELLS WITH M.A. METER £12:5:0

PORTABLE GALVANIC RHEOSTAT
FOR USE WITH DIRECT CURRENT SUPPLY £10:0:0.
FOR IONISATION, ETC. £13:0:0

CAUTERY AND LIGHT TRANSFORMER
FOR ALTERNATING CURRENT £7:10:0

CAUTERY AND LIGHT TRANSFORMER
FOR DIRECT CURRENT SUPPLY. £26:0:0

SCHNEE BATHS
ARM OR LEG £1:16:0 PER CELL
OAK STOOLS £1:11:6 FOR ABOVE
£10:0:0

Medical Electricity in General Medical Practice
FREE ON APPLICATION

Electro Medical Apparatus

Enquiries, both from Doctors and private individuals, are increasing. The Chemist is the appropriate person to handle the business. Do not let it go to a rival.

WHATEVER YOU ARE ASKED FOR WRITE TO US. WE CAN GIVE YOU HIGHEST GRADE WORKMANSHIP AT COMPETITIVE FIGURES.

X-Ray Apparatus.
Radiant Heat & Light Apparatus.
Galvanic Batteries, etc.

MEDICAL SUPPLY ASSOCN. LTD.
167-185 Gray's Inn Road, London, W.C.1

We invite you to visit our Showrooms.

Dubarry's Latest Novelty

"EXTENSOR" VANITY BOX

Containing "Powdrette" (solid face powder) and Solid Rouge in the proportion of 5 of powder to 1 of rouge.

IT HAS PROVED
AN INSTANT SUCCESS



THE Powder and Rouge are contained in metal cups or "godets," which can be replaced when empty.

The boxes are TRIPLE GOLD PLATED. They are 2½ inches in diameter, fitted with mirror and two dainty satin-backed lambskin puffs.

Both Powder and Rouge are delightfully perfumed. Two tints of Powder are available—Rachel and Naturelle, and one shade only of Rouge.

RETAIL 5/-

USUAL TERMS.

DUBARRY ET CIE,
Parfumeurs
81, BROMPTON ROAD,
LONDON, S.W.3.

